FISH & WILDLIFE SER
PACIFIC OCEANIC
INVESTIGATIO

PACIFIC FISHERMAN

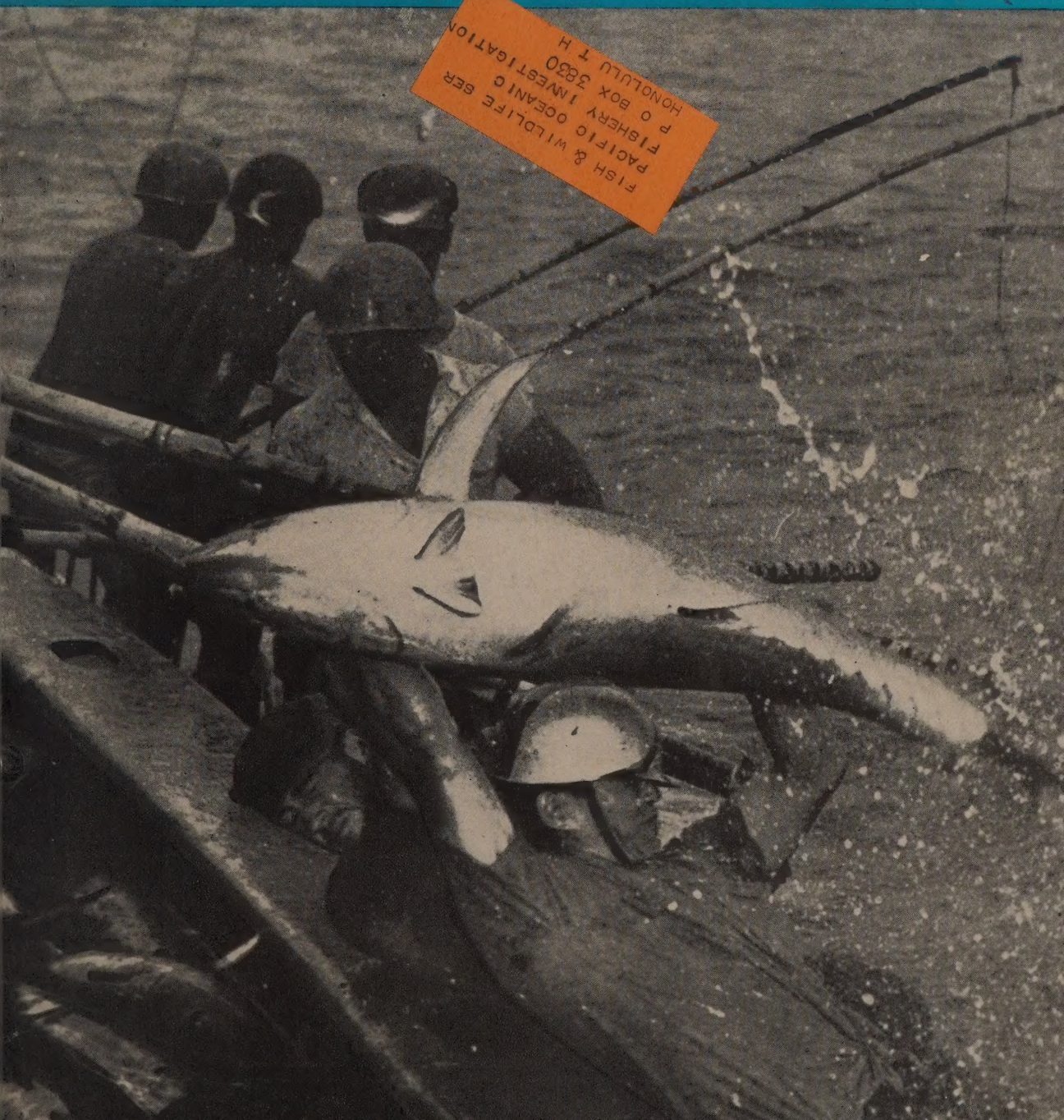
JULY
1951

A Miller Freeman Publicati

THIRTY-FIVE CENTS

JUL 2

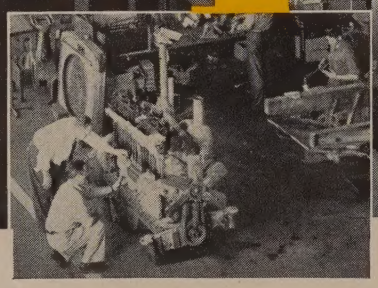
P25 P29 P31+



FISH & WILDLIFE SER
PACIFIC OCEANIC
FISHERY INVESTIGATION
P O BOX 3830
HONOLULU T H

Your strong right arm...

in time of need



BECAUSE of the vast defense mobilization program, material shortages and extra production demands have gripped the nation. They affect particularly the heavy industries and the distributors and users of their products. And huge as America's facilities have become in recent years, they still are not large enough to keep pace with both military and civilian needs.

Nevertheless, as an owner of "Caterpillar" products, you are among the more fortunate. Your "Cat" equipment has been built for long life and to withstand severe working conditions. What's more, it is backed by a dealer organization that is world-famous for experience, accessibility, mechanical facilities and dockside service to keep you going "come hell or high water."

Since World War II, the already large number of "Caterpillar" sales-and-service establishments has increased greatly. Also since that time, "Caterpillar" and its dealers have developed new techniques for restoring and extending the life of "Caterpillar" products. Today, in their own shops, "Caterpillar" dealers can *rebuild* a great many worn or damaged parts which formerly required completely new replacement. In short, every dealer is richly acquainted with scores of modern ways and means for keeping your "Cat" Marine Diesels in good working condition. You can help by doing this:

Take your maintenance problems to your "Caterpillar" dealer* BEFORE *parts are worn beyond repair

Remember that excessively worn parts can cause damage to mating parts; that pistons and liners, crankshafts, cylinder heads, heat exchangers and other items usually can be salvaged. Your problems are your dealer's problems. Go see him today. He'll do everything in his power to keep your Engines operating. Your combined efforts will be reflected in longer equipment life.

CATERPILLAR, San Leandro, Calif.; Peoria, Ill.

CATERPILLAR
REG. U. S. PAT. OFF.
DIESEL *Marine Engines*

PACIFIC FISHERMAN (with which is combined West Coast Fisheries) is published monthly except in January when publication is semi-monthly, by MILLER FREEMAN PUBLICATIONS, INC., at 815 Witmer St., Los Angeles 17, California. Executive, Advertising and Editorial Offices, 71 Columbia St., Seattle 4, Washington. Subscription: United States and Canada, $3.00 per year, Foreign $4.00 a year. Entered as second class matter at Los Angeles, California. Postmaster: Please send Notice 3579 to PACIFIC FISHERMAN, 71 Columbia St., Seattle 4, Washington.

PACIFIC FISHERMAN

A Miller Freeman Publication

Vol. 49 **No. 8**

JULY, 1951

TABLE OF CONTENTS

Freezership Revolution 15
"Wonderful World"—An Editorial 25
Danger in Excess 27
How Tuna First Was Packed and Sold 31
Paladini's Packaging 41
Herring Fishermen Force Floor Up 48
Halibut Fishing Only 56 Days 45
Quality Frozen Salmon Needed for Subsequent Canning 34

President ..... **Miller Freeman**
Manager ..... **Lawrence K. Smith**
Editor ..... **DeWitt Gilbert**
Advertising Manager ..... **C. L. Hillyard**
Circulation Manager ..... **Miller Freeman, Jr.**

Publication Office
815 Witmer St. **Los Angeles 17** **DUnkirk 9-1112**

Editorial, Advertising and Executive Offices
71 Columbia St. **Seattle 4** **MAin 1626**

Branch Offices

LOS ANGELES 17
A. W. Ponsford, Associate Editor
815 Witmer St. DU. 9-1112

SAN FRANCISCO 5
Stuart F. Leete, Associate Editor
121 Second St. CA. 1-5887

VANCOUVER, B. C.
Charles L. Shaw, Associate Editor
Royal Bank Bldg. MA. 1520

PORTLAND 4
534 S. W. 3rd Ave. BE. 6348

WILMINGTON
315 N. Avalon Blvd. TE. 4-4538

NEW YORK CITY 17
370 Lexington Ave.

NEW ORLEANS 18
3518 Dante Street

Armed Services Supply of Salmon Threatened by Labor Strife

With less than a week remaining at presstime before the legal opening of the Bristol Bay salmon season, the needs of the Armed Service for canned salmon were being seriously threatened by a complex of labor problem. The Army wants 360,000 cases of Red salmon, and Bristol Bay is the only place it could come from.

Jurisdictional dispute on Bristol Bay between the Alaska Fishermen's Union and the Bering Sea Fisherman's Union, which is challenging the position of the old A.F.U., had been before the N.L.R.B. since January, with no action taken at presstime.

N.L.R.B. delay in taking effective action in this dispute was threatening to turn fishery over to the several floating plants in the Bay this year under encouragement of the Department of Interior action in permitting the use of power boats in that fishery this year for the first time.

Finally, a pall was cast over Pacific Coast maritime affairs—which necessarily means Alaska salmon canning—by the seriously-threatening maritime labor tangle.

"Pacific Perch" May Win Official U. S. Acceptance

Hope that an important new fishery resource would be made available for economic utilization by the Pacific trawl fish and fillet industry was seen in June. Indication that the Food and Drug Administration would not oppose a consent decree under which certain specific species of fish could be marketed under the general name of "perch."

This position was offered subject to two qualifications: 1, that determination of the species for which the term "perch" could be used would be based upon the opinions and findings of leading scientists; 2, that a geographical designation accompany the name, such as "Pacific Perch."

Tunaboat Association Engages Dr. Chapman for Research

Dr. W. M. Chapman, former special assistant to the Undersecretary of State, has been engaged by the American Tunaboat Association as its Director of Research, it was announced by the association at presstime. Dr. Chapman is relinquishing his connection with the University of Washington School of Fisheries, of which he was formerly director, and from which he has been on leave of absence for three years.

"American Tunaboat Association has engaged one of the world's foremost fishery scientists and will give him a free hand in pursuing the search for knowledge of the tunas and tuna bait fishes. He will interpret for the association world studies in tuna; and may act as scientific director and liaison for specific research which the Tunaboat Association may decide to sponsor through the medium of existing research agencies," Harold F. Cary, manager of the A.T.A., told PACIFIC FISHERMAN.

The COVER PICTURE

The flashing action on our cover was photographed by Lee F. Beveridge of the Van Camp Sea Food Co. on the clipper *Chicken of the Sea*, working a Yellowfin school far offshore. In case you are interested, the fishermen landed their 100-pound quarry. Beveridge reports that the two-man team swung their fish safely over the rail. This is the kind of fishing that weeds the men from the boys on a tuna trip.

MILE LONG NETS CATCH FISH in EGYPT

CREWS OF FISHERMEN WORK FOR MANY HOURS HAULING IN THE ENDS OF THESE HUGE HORSESHOE SHAPED NETS····AND OFTEN LAND ONLY A HANDFUL OF SMALL FISH. THE NETS ARE SET TIME AFTER TIME WITH LITTLE REWARD.

TODAY... MODERN EQUIPMENT MEANS BIG HAULS, RADAR, AUTOMATIC STEERING... DEPTH FINDERS... AND R. J. EDERER NETTING. AFTER 68 YEARS OF DEVELOPMENT, THIS NETTING HAS THE REPUTATION OF BEING THE STRONGEST, MOST UNIFORM, MOST DEPENDABLE OF ALL NETTING BEING MADE TODAY.

CENTURIES AGO CARAVELS FROM EUROPE CAME TO MACAO FOR SILK AND TEA. HUNDREDS OF FISH BOATS NOW FILL THE HARBOR WITH THEIR NETS HANGING LIKE SAILS TO DRY.

TRADE EDERER MARK

R. J. EDERER COMPANY

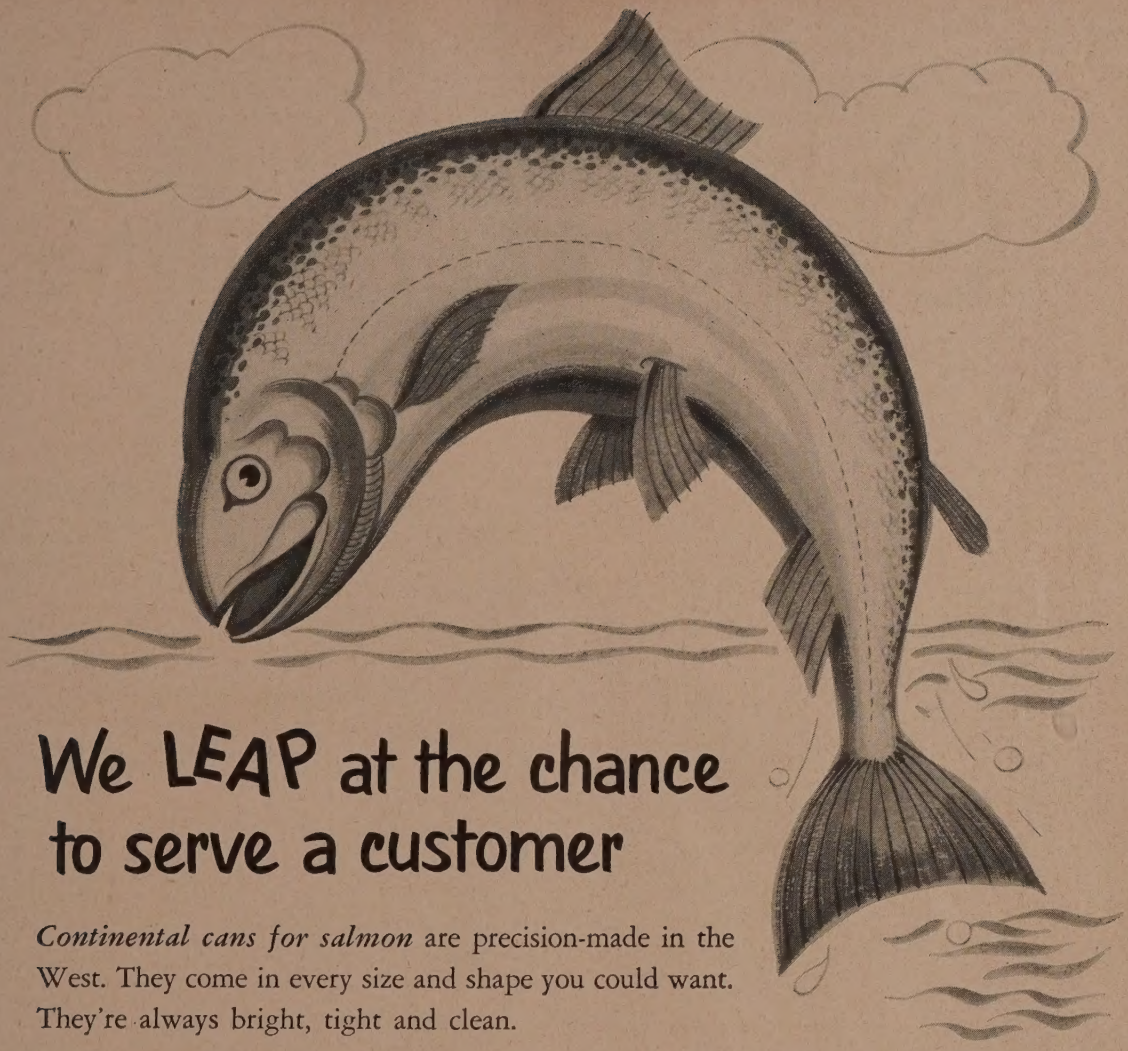
HOME OFFICE: 540 ORLEANS ST., CHICAGO

PACIFIC COAST DISTRIBUTORS:

C. J. HENDRY COMPANY
San Pedro San Diego
San Francisco, California

SUNDE & D'EVERS COMPANY
Seattle, Washington
Ketchikan, Alaska

THE BEEBE COMPANY
Portland, Oregon
Astoria, Oregon



We LEAP at the chance to serve a customer

Continental cans for salmon are precision-made in the West. They come in every size and shape you could want. They're always bright, tight and clean.

But Continental offers more than just a good product. Our service, too, is tops for quality. We leap at a chance to find answers to our customer's problems. By train, plane and car, our experts will travel more than a million miles this year to bring canners the benefit of their experience.

You can't beat Continental as a dependable source of supply!

CONTINENTAL CAN COMPANY

1120 WILSHIRE BLVD. LOS ANGELES 17, CALIF. RUSS BUILDING SAN FRANCISCO 4, CALIF.
653 SKINNER BUILDING SEATTLE 1, WASH.

CONGRATULATIONS are in order!

Congratulations to the great tuna fishing industry on the occasion of its 50th birthday—from Canco on the occasion of theirs.

We're proud to have worked with you . . . to have *helped* your business grow from a good idea to a multi-million dollar operation. Folks in Chicago, in Memphis, in Bangor— people the world over, who couldn't have tasted canned tuna fish fifty years ago—can now enjoy that delicious treat any day in the year.

Today, as we both look forward to the future, remember—

Canco engineers . . . home economists . . . merchandising experts . . . and production men stand ready and willing to help you.

So again, congratulations . . . and a sincere wish for many years of continued growth.

1901 Containers to Help People Live Better 1951
AMERICAN CAN COMPANY
50th ANNIVERSARY 1951
Markets for Industry and Agriculture

1901—50TH ANNIVERSARY—1951

CANCO

AMERICAN CAN CO.

New York • Chicago • San Francisco • Hamilton, Canada

Always Dependable!

Chrysler Crown
Model M-47

Taking chances doesn't make sense when you're on the water! You've got to have an engine that keeps on running regardless of wind or weather.

That's why so many thousands of boatmen insist on Chrysler Marine Engines. They know they can *count on Chrysler!* For Chrysler Marine Engines are built solely for marine use—brilliantly engineered throughout to conquer the sea. None is converted, rebored or rebuilt.

Dollar for dollar Chrysler, first choice in its power range, is your best buy. Seven models—218 to 377 cu. in. displacement. See your dealer or mail the coupon.

Chrysler

AMERICA'S NO. 1 MARINE ENGINE

Parts and Service quickly available everywhere.

Mail this coupon for details!

Marine Engine Division, Chrysler Corporati
12200 East Jefferson Avenue, Detroit, Mic

Send me literature on your 1951 line ☐
Hydraulic Control for my Chrysler Marine Engine

NAME _____

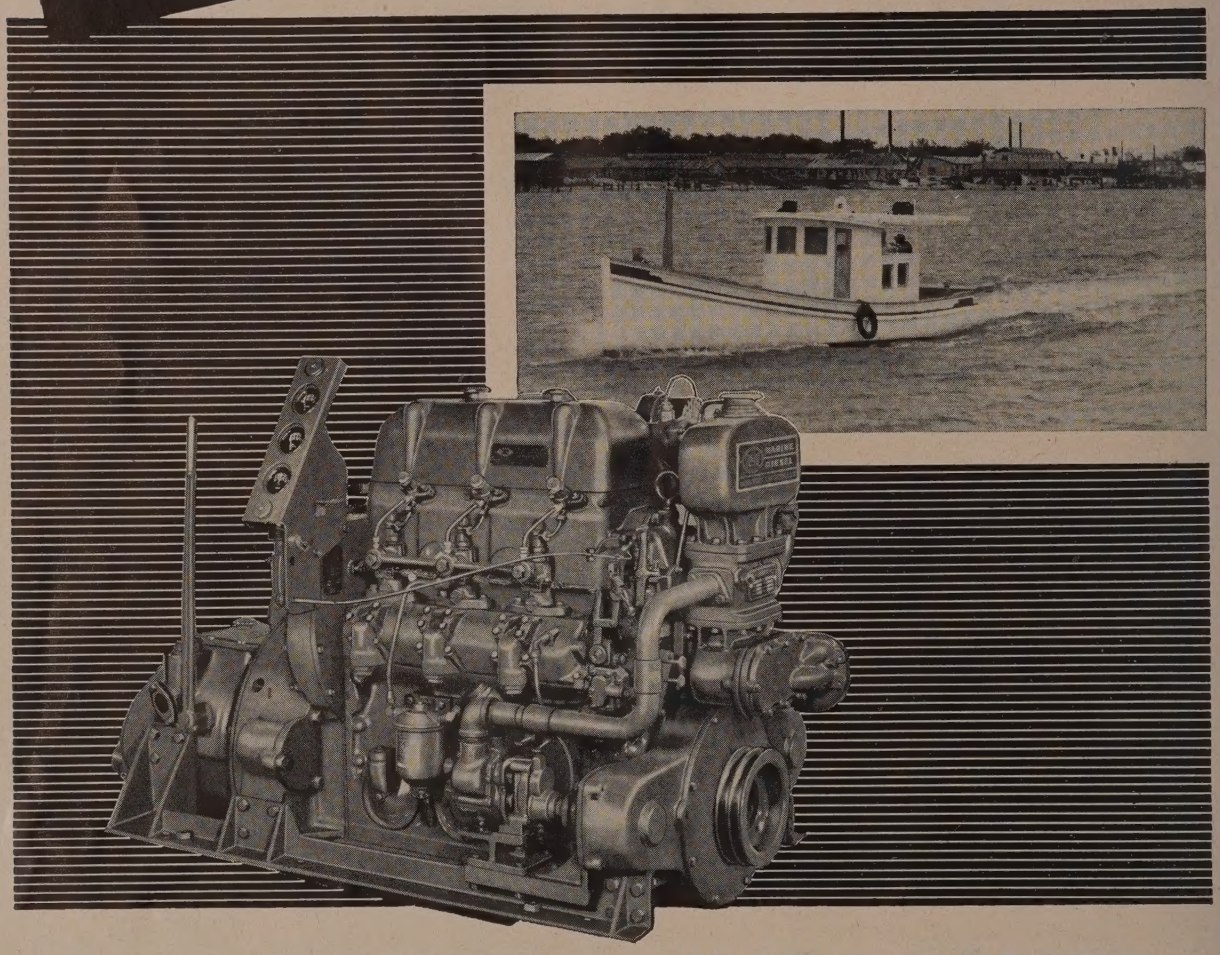
STREET _____

CITY _____ ST

TYPE OF BOAT OWNED _____

P&H MARINE DIESELS

2-CYCLE



LESS WEIGHT . . . MORE POWER

Your profits come from the pounds of *fish* you carry—not from the pounds of engine. That's one reason you save money every trip with a P&H Marine Diesel — less weight per horsepower.

The use of lightweight, corrosion-resistant alloy castings does away with needless excess weight — a P&H is all *working weight.*

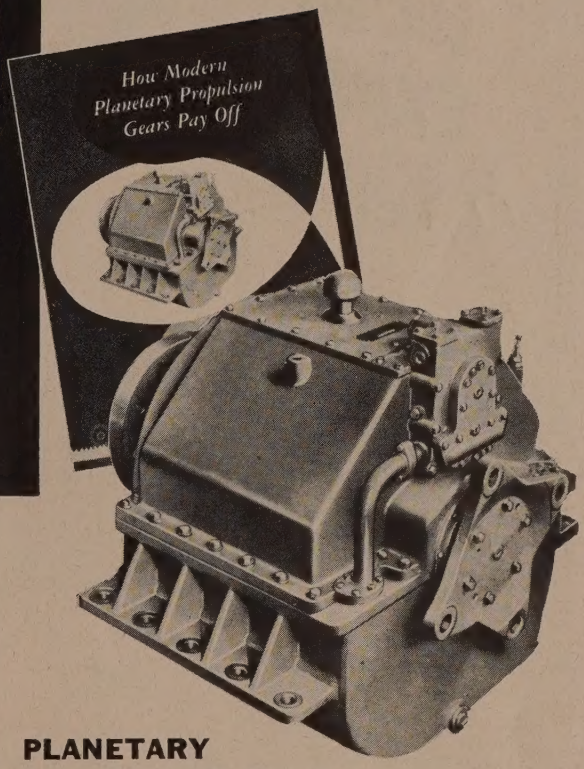
A P&H is *simpler* in design — there are far fewer parts. This means faster, easier servicing, greater dependability.

Get full information on these advanced marine diesel engines today. There are P&H Models in 2, 3, 4 and 6 cylinders up to 145 horsepower.

P&H DIESEL DIVISION
HARNISCHFEGER CORPORATION
PORT WASHINGTON WISCONSIN, U. S. A.

GEAR YOUR BOAT FOR ECONOMY

Gain the advantages of economy and efficiency of operation through the use of modern marine equipment designed and built by Western Gear Works—and backed by more than 50 years of gearmaking experience.

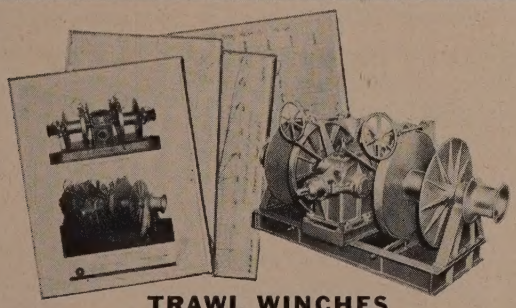


REVERSE AND REDUCTION GEAR

The Western Marine reverse and reduction gear is available in sizes up to 500 hp, ratios 1½:1 to 4:1. It provides the great advantages of fingertip shifting, easy remote control, automatic lubrication. Eliminates stopping and restarting engine for reversing. Permits R and L screw rotation with two right-hand engines. Power take-offs available.

PLANETARY PROPULSION GEAR

This modern planetary marine propulsion gear is available for engines from 600 hp up. Sizes up to 50,000 hp have been built. A Pacific-Western planetary propulsion gear saves weight and space.



TRAWL WINCHES

A full line of new improved trawl winches is available for bottom-fishing vessels.

511

Makers of Good Gears for over Fifty Years

Plants • 417 Ninth Ave. S., Seattle 4, Wash.
2600 E. Imperial Highway, Lynwood, Los Angeles County, California
1035 Folsom St., San Francisco 3, Calif.
117 N. Palmer St., Houston, Texas

Representatives • 930 S.E. Oak St., Portland 14, Oregon
Room 211, Chamber of Commerce Bldg., Denver, Colorado
Engineering & Machinery Ltd., 1366 W. Broadway, Vancouver, B.C.

USE HANDY COUPON FOR QUICK INFORMATION

Attach this coupon to your letterhead and mail to your nearest Pacific-Western plant or office.

Gentlemen: Please send me the information requested by return mail.

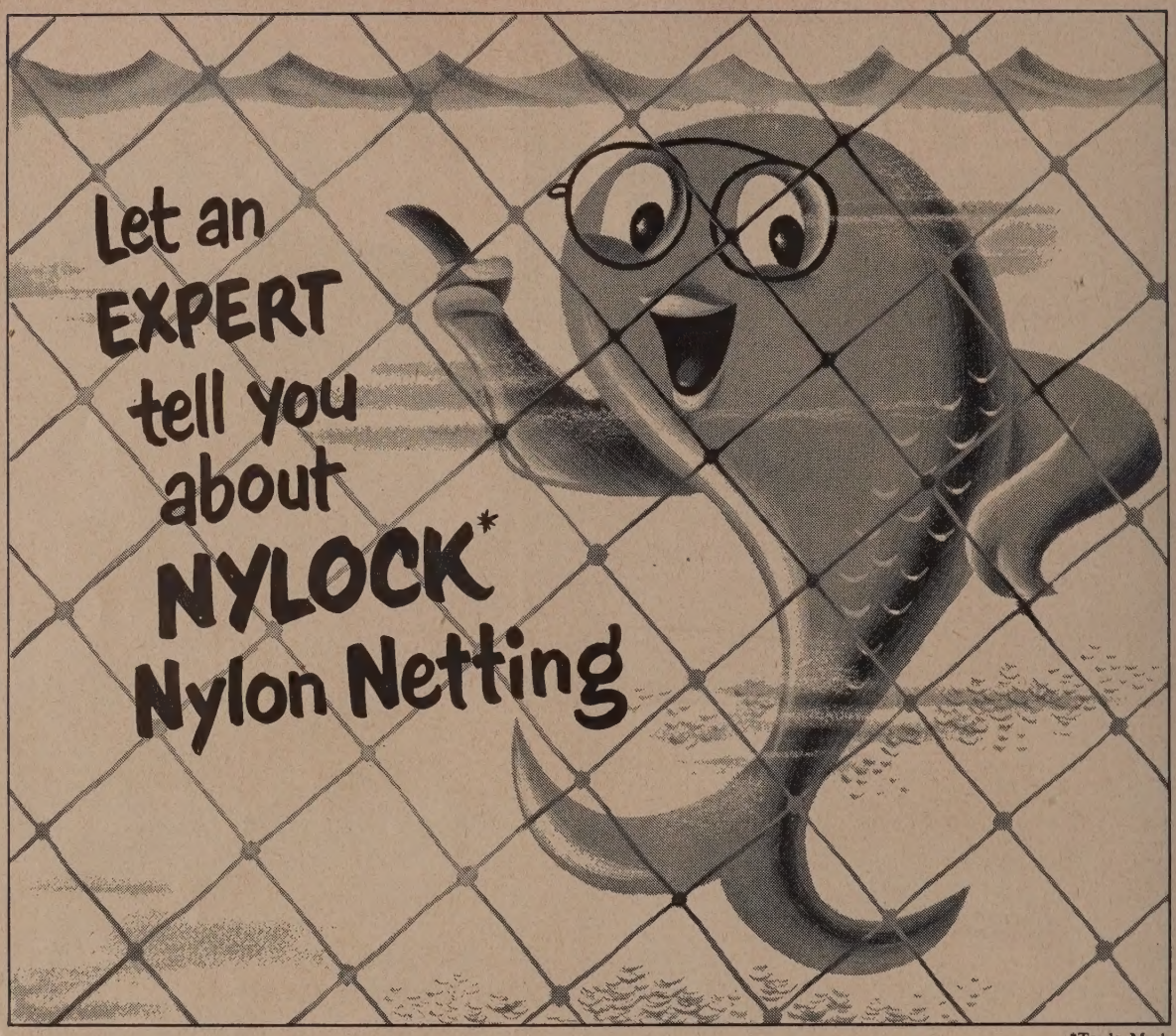
☐ Planetary Gear; ☐ R & R Gear; ☐ Trawl Winch;
☐ Other gear product (please specify)

NAME_____

TITLE_____

WESTERN GEAR WORKS
Manufacturers of **PACIFIC-WESTERN** Gear Products
Pacific Gear & Tool Works

Plants: **Seattle**, **San Francisco**, **Lynwood** (Los Angeles County), **Houston**
Representatives: **Portland**, **Denver**, **Vancouver, B.C.**



*Trade Mark

• We have it straight from the "fish's mouth" that they find NYLOCK 100% Nylon Nets *completely irresistible!* For according to actual tests, NYLOCK catches from 3 to 12 times as many fish as ordinary nets.

What the FISH don't know however, is that NYLOCK's superiority is due to a special treatment (patent pending) that locks the threads together and prevents the knots from slipping.

NYLOCK Nets have other advantages, too. No drying is necessary and they need no preservatives. They're stronger, longer-lasting . . . unaffected by mildew, fungus, oil, gasoline, etc. AND — they're lighter, easier to handle.

WHAT ABOUT DELIVERIES? Due to the current scarcity of Nylon, nets made of NYLOCK Netting may not be available in your area. As soon as conditions permit, your order will be filled.

For further information, get in touch with one of the following manufacturers who use NYLOCK Nylon exclusively for all their Nylon Fish Netting:

R. J. EDERER and subsidiaries—540 Orleans St., Chicago, Ill.—Unity and Elizabeth Sts., Philadelphia, Pa.

THE FISH NET & TWINE CO.—310-312 Bergen Ave., Jersey City, N. J.

MOODUS NET & TWINE INC.—Moodus, Connecticut

A. M. STARR NET CO.—East Hampton, Connecticut

JOSEPH F. SHEA, INC., Successor John S. Brooks, East Haddam, Connecticut

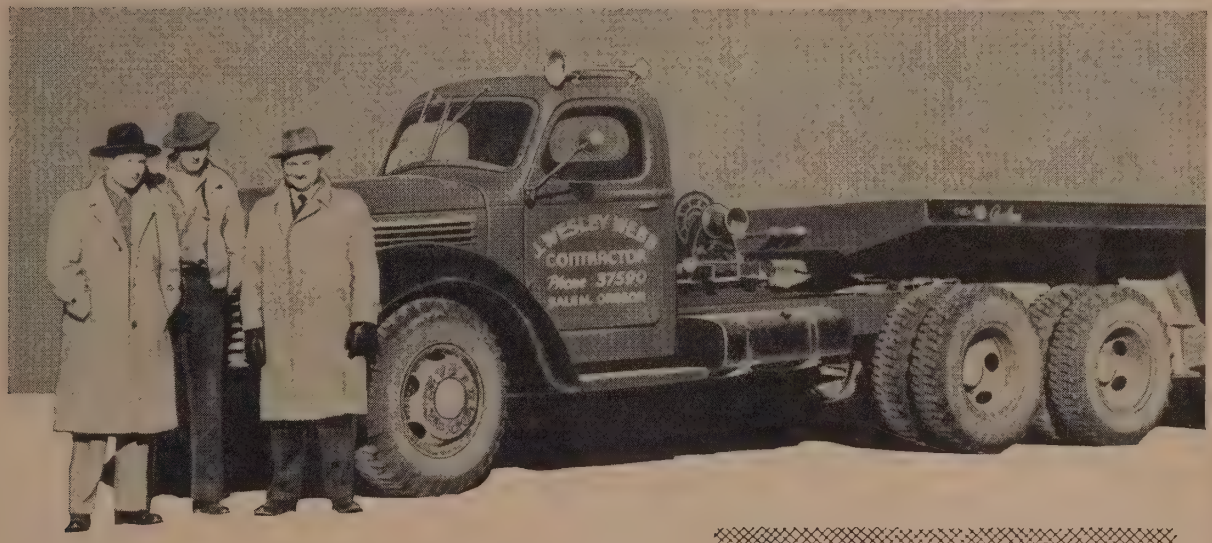
Be Sure to Specify NYLOCK When Ordering Your Nylon Netting

SOLE DISTRIBUTORS:
BROWNELL & COMPANY, *Inc.*
—also manufacturers of Nylon Maitre Cord and Hanging Twine
Moodus, Connecticut

MANUFACTURED BY:
The **HEMINWAY & BARTLETT** *Mfg. Co.*
500 Fifth Avenue, New York 18, N. Y.

Oregon Road Contractor Reports:

"We're Using 11% LESS OIL Since We Switched to HEAVY DUTY TYDOLS"



"Building a road high in the Molalla Mountains, our trucks, tractors, shovels, compressors and other equipment put lubricating oils to a rugged test," says J. Wesley Webb, Salem (Oregon) contractor. "Yet we're now using 11% less oil per month with Heavy Duty Tydols on the job, than with the competitive HD oils we had been using under similar conditions.

"My entire organization—cat skinners, truck drivers, shovel operators, everyone—is enthusiastic about the outstanding performance we're getting with Heavy Duty Tydols...in both gasoline and diesel units."

WHY HEAVY DUTY TYDOLS REDUCE Oil Consumption

No doubt about it. A clean engine...one that's free from sludge, carbon and acid corrosion...uses less oil. It gives peak performance longer between overhauls, too.

Extra rich in active cleansing ingredients, Heavy Duty Tydols *keep engine "whistle-clean."* They drive out sludge...keep carbon deposits from forming...prevent corrosive wear on rings and cylinder walls. No other oil keeps engine so clean...so free from wear.

That's why Tydol HD oils are winning new praise every day from critical users like J. Wesley Webb. That's why it'll pay you to change to these oils that clean as they protect as they lubricate.

3 GREAT HEAVY DUTY TYDOLS

100% paraffin base high V.I. motor oils scientifically compounded with selected additives.

TYDOL HD—High detergency

TYDOL HD S-1—Higher detergency

TYDOL HD S-2—Highest detergency

Ask your Associated Representative which Tydol meets your needs.

TYDOL HD MOTOR OIL

TIDE WATER ASSOCIATED OIL COMPANY (WESTERN DIVISION)

Choose a Fairbanks-Morse Marine Diesel ..and save!

SAVE SPACE

SAVE WEIGHT

SAVE TIME

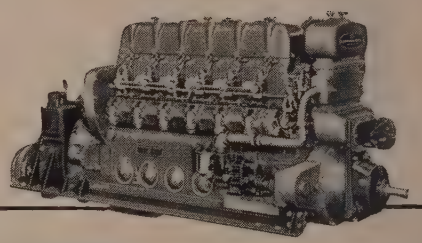
SAVE MONEY

In all marine service where space is at a premium and reliable power a must—Fairbanks-Morse Marine Diesels offer unequaled opportunity to save for more profit per trip.

FOR EXAMPLE:

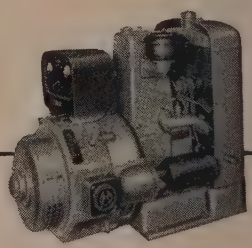
the MODEL 38 O-P

Two pistons in each cylinder—no valves, no cylinder heads—fewer moving parts—for longer life, easier maintenance at lower cost. Add its economy and proved dependability and you have the ideal engine for the broadest range of marine applications up to 2000 hp.



the MODEL 49

Featuring unitized cylinder design, simplifies operating and maintenance. Cylinder head and liner assembly is removed as a unit, without dropping the pan—makes overhaul an easy, inexpensive, half-day job. Built of light, strong, corrosion-resistant alloys, it packs more power per pound . . . brings you swift response, economy and dependability for propulsion or auxiliary service in the 40 to 150 hp. class.



the MODEL 45B

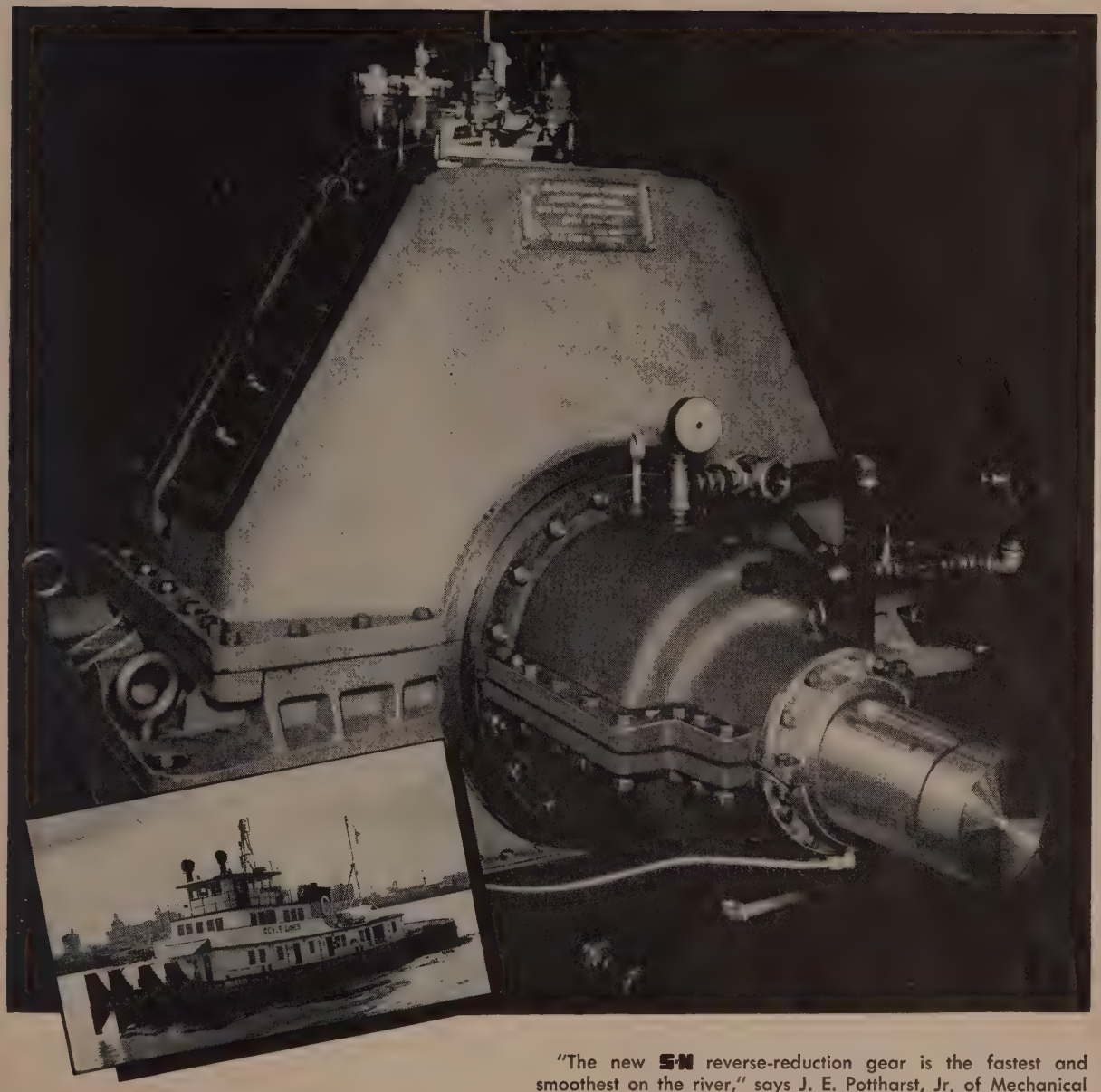
For the lowest cost auxiliary power available under the most demanding marine conditions. Simple in design, compact, easy to service, there is a model 45B ideally suited for your requirements in the 5 to 10 hp. range.

FOR ALL MARINE SERVICE . . . THE NAME IS FAIRBANKS-MORSE

FAIRBANKS-MORSE,

a name worth remembering

DIESEL AND DUAL FUEL ENGINES • DIESEL LOCOMOTIVES • PUMPS • SCALES
ELECTRICAL MACHINERY • RAIL CARS • MAGNETOS • FARM MACHINERY



REVERSING TIME
CUT 50%
BY NEW S-N GEAR

"The new S-N reverse-reduction gear is the fastest and smoothest on the river," says J. E. Pottharst, Jr. of Mechanical Equipment Company, Inc. Model #5996 (2.5:1 reduction) handles the 1000 h.p. at 750 r.p.m. Chicago Pneumatic Diesel engine with a speed and ease which astounds all who have watched its operation.

The Towboat "Houston," owned by the Coyle Lines, is one of three identical towboats being built by Arnold V. Walker Shipyards at Pascagoula, Miss. They are being equipped with twin 8—12 C.P.S. diesels and S-N reverse-reduction gears under the supervision of Mechanical Equipment Company of New Orleans.

Enjoy the benefits of S-N's half century of transmission experience. Specify S-N Reverse & Reduction gears for your boat. Phone, wire or write today for data and quotations on your needs.

★ 4 to 1000 H.P. ★

MAKERS OF JOE'S FAMOUS GEARS

The SNOW-NABSTEDT
GEAR CORPORATION

P. O. BOX 1753, NEW HAVEN, CONN., U.S.A.

International MARINE PAINTS —PREVENT

RUST AND FOULING

ON METAL BOTTOMS

Here is a combination of International Bottom Paints that offer maximum protection to metal bottoms. They are INTERLUX SILVER PRIMOCON No. 347 and INTER-TROP No. 50. The SILVER PRIMOCON prevents the corrosion of plates, seams and rivets by effectively sealing off the penetration of salt water. INTER-TROP No. 50 is a highly antifouling paint that is especially formulated to adhere to SILVER PRIMOCON. The two used together go a long way to solve the age-old problem of preventing both rust and fouling of steel bottoms.

Write for the two folders, "INTERLUX SILVER PRIMOCON No. 347" and "INTER-TROP No. 50"

International

ANTIFOULING

BOTTOM PAINTS

International Paint Company, Inc.
21 West Street, New York 6, N. Y.
S. Linden Ave., S. San Francisco, Cal.
1145 Annunciation St., New Orleans, La.

International Paints [Canada] Ltd.
6700 Park Avenue, Montreal, Quebec
Harbor & Railway St., No. Vancouver, B.C.

AGENTS IN EVERY IMPORTANT PORT

In all Waters

ONAN ELECTRIC PLANTS

serve the Workboat Fleet

Onan Electric Plants supply light and power for shrimpers, trawlers, tugs . . . craft of every size and purpose. They speed work aboard and save time by permitting use of electrical equipment such as lights, bilge pumps, compressors, radios, pressure water systems. Smooth-running, dependable, with Onan built-in safety features. Compact, easy to install. Many models—400 to 5,000 watts. A.C., D.C., Battery Charging and Dual Purpose A.C.-D.C. models.

MODEL MTK—*Two-cylinder, water-cooled. 3,500 watts.*

Model 205 DSP
Single-cylinder, air-cooled Diesel engine. 2,500 watts A.C. or 32-volt battery charging model.

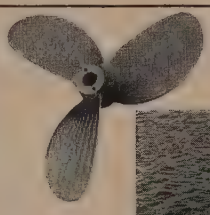
Separate Generators
For belt drive off the propulsion engine. 1½ to 60 KW. Variable speed model, 2-KW, 32-volt.

Write for folder

Onan PRODUCTS

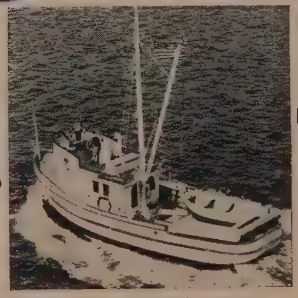
D. W. ONAN & SONS INC.

7322 UNIVERSITY AVE., MINNEAPOLIS, MINNESOTA



Lambie

PROPELLER COMPANY, Inc.



A Tradition in Propellers

•

Designs, Sales and Service

DYNAMIC BALANCING

216 EAST C ST.
WILMINGTON, CALIF. TErminal 4-2505 ZEnith 4250

Authorized Dealer
RCA RADIOMARINE
Radiotelephones • Direction Finders

RADIOMARINE

DIRECTION FINDERS • RADIOTELEPHONES

Shepherd Radio Shops are skillfully manned and equipped to service your radio equipment. Complete spare parts available.

only at

Los Angeles AN 10261
San Diego FR 99471

SHEPHERD
DIESEL MARINE

San Pedro TL 1-2781

Capt. George Kell, one of the most experienced tuna fishermen and an Albacore expert, answers a call received on his Radiomarine 75-watt Radiotelephone.

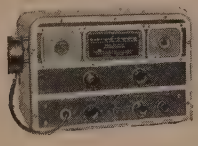
"I can reach the length and breadth of the tuna fishery with my Radiomarine Radiotelephone"

Capt. George Kell, Owner-skipper of the "New Comer"

FOR OVER TWO YEARS Radiomarine model ET-8012-D has supplied dependable radiotelephone service to Capt. George Kell and the crew of the tuna clipper, "New Comer." The hardworking, 56-foot-long, 17-foot-8-inch-beam, "New Comer," shown above, is returning from a 130-day-trip fishing below the international border out of Los Angeles Harbor.

Radiomarine Model ET-8012-D is a 75-watt, 10-channel radiotelephone. It operates from 32- or 110-volt d-c power supply. Because of its long range and dependable performance it is a favorite of offshore fishing vessels. Radiomarine Radiotelephones keep owners and captains of fishing craft in touch with the home office . . . advised of markets, locations of schools of fish . . . summon aid in case of breakdowns. A Radiomarine Radiotelephone steps up efficiency of fishing craft and work boats, quickly pays for itself.

Write for illustrated literature.



Model ET-8044
4 channels, Standard Broadcast Reception

Model AR-8711
Direction Finder with Standard Broadcast Radio

Model ET-8037
30 watts, 6 channels

DEALERS IN PRINCIPAL BOATING AND FISHING AREAS

Radiomarine Corporation of America
1008 Western Avenue
Seattle 4, Wash.
Tel: Seneca 8187

Radiomarine Corporation of America
16 First Street
San Francisco 5, Calif.
Tel: Garfield 1-0673

Radiomarine Corporation of America
437 North Avalon Blvd.
Wilmington, Calif.
Tel: Terminal 4-1581

RCA

RADIOMARINE CORPORATION of AMERICA

A SERVICE OF RADIO CORPORATION OF AMERICA

BENDIX DEPTH RECORDERS

mean more safety, economy, and greater fishing profits for you!

THE BANTAM

(illustrated)

0 to 100 fathoms range

12, 24, 32 D. C. voltages

50 K. C. frequency

14-5/16" wide x 20-1/8" high x 18-13/16" deep

8" x 7" viewing window

Platinum gray dull wrinkle finish

Weighs 40 pounds

Uses 72 ft. spool graph paper. (Graduated 0-600 ft., 43 hours, optional.)

Transducer, power cable, sea chest for wooden or steel hull

MODEL DR-7A

Over 20,000 quality marine items are distributed by the seven affiliated stores, including the famous brands listed below

PLYMOUTH Ship' Brand rope and twine
BARBOUR'S linen and GOLD MEDAL cotton netting
LUBRIPLATE marine lubricants
GOODRICH *Cutless* rubber bearings
FEDERAL propellers
JOE'S & S-N marine reverse and reduction gears
JABSCO and OBERDORFER pumps
UNIVERSAL motors & water-cooled light plants
JOHNSON outboard motors
WILCOX-CRITTENDEN hardware
WOOLSEY and DEVOE & RAYNOLDS marine paints, varnishes
CHAMPION spark plugs
GALLEY GAL and SKIPPY stoves
HALF-MILE and MILE-RAY searchlights
WILFRID O. WHITE and DIRIGO compasses
TAYLOR and AIRGUIDE barometers
A & P Approved life preservers
APEX marine batteries
MAXIM silencers
PYRENE and C-O-TWO fire extinguishers

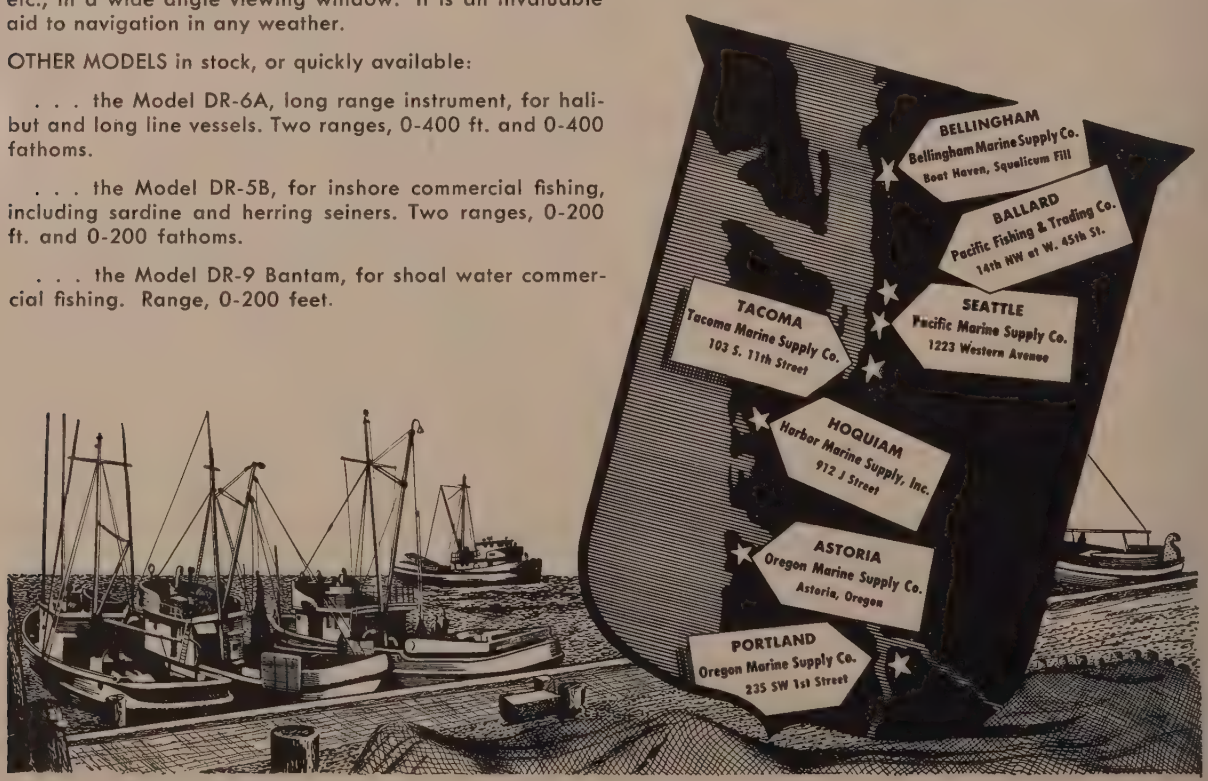
The Bendix Bantam Recorder is a complete unit, self-contained and accurate. Self-synchronizing stylus records an instantaneous, permanent record of the bottom in natural profile, showing hidden reefs, kelp beds, schools of fish, etc., in a wide angle viewing window. It is an invaluable aid to navigation in any weather.

OTHER MODELS in stock, or quickly available:

. . . the Model DR-6A, long range instrument, for halibut and long line vessels. Two ranges, 0-400 ft. and 0-400 fathoms.

. . . the Model DR-5B, for inshore commercial fishing, including sardine and herring seiners. Two ranges, 0-200 ft. and 0-200 fathoms.

. . . the Model DR-9 Bantam, for shoal water commercial fishing. Range, 0-200 feet.



PACIFIC FISHERMAN

July 1951

Sea Lark, which currently holds the world's tuna trip record with a fare of 583 tons landed in March of this year, here assumes the role of Bristol Bay freezership and loads her nine gillnet boats as she sets out to the North for a load of salmon.

FREEZERSHIP REVOLUTION

Revolution is under way in the fisheries of Western Alaska this summer. If it succeeds it will work wide change.

Even if it fails, the rich Red salmon fishery of Bristol Bay will never again be quite the same, for inevitably some portion of the sweeping innovations of 1951 will "stick," and will serve to shape the technology, the economics and the competitive alignment of the future.

There are at least three main forces in the revolution of 1951:

1. Power boats—permitted for the first time this year by the federal fisheries service;

2. Freezerships—pioneered in 1949 and 1950, but increased to 10 this year by advent of power fishing boats;

3. Set-nets—permitted to operate in greatly increased numbers by sweeping addition to the areas open to this form of gear.

Most notable of the three forces listed above is the second—Freezerships, of which there are 10 major units in Western Alaska this season.

Multiplication of the number of freezerships this year results primarily from:

1. The introduction of power fishing vessels. Freezership operation on Bristol Bay in the past has been handicapped by the prohibition against power. With its introduction this year, the use of floating freezers was greatly encouraged.

2. Proven practicability of brine freezing as a means of protecting the freshness of salmon from their taking at the peak of a great run at a remote point until they can be canned at a low-cost packing center.

3. Mechanical and gravity handling of fish made possible by the brine-freezing system is counted upon to overcome the cost and manpower problems encountered in 1948 and 1949 by the pioneering freezerships *Reefer King* and *Pacific Queen.*

The freezership line-up is briefed in a table accompanying this article, which will be devoted primarily to discussion of the major vessels entering the Alaska fishery this year for the first time. Four others, which are returning to Alaska this year after previous experience there are: *Neva, Pacific Queen, Reefer King* and *Sea Lark.*

They have previously been dealt with editorially in this journel as follows:

"Reefer King to Freeze Bristol Bay Reds for Canning on Puget Sound," PACIFIC FISHERMAN, July, 1948: page 33.

"The Freezership Pacific Queen,

Bristol Bay Freezerships

Name	Owner	Operator or Master	Size	Boats
NEW OPERATIONS				
Alaska Reefer	J. Breskovich, et al.	Sig Haavik	184	10
Alert	O. L. Grimes	J. Kristensen	92	2
Great Sitkin	O. L. Grimes	Nick Foster	105	3
Michelle Eve	Malaspina Fisheries Co.	John E. Niemi	136	(?)
North Star	North Star Fisheries	Same	220	12
Sundown	Sundown Fisheries	Dan Luketa	115	4
Toni B.	Trans-Pacific Fishing & Packing Co.	John Bez	165	12
CONTINUING OPERATIONS				
Neva	Pacific American Fisheries	Same	328	(?)
Pacific Queen	Pacific Queen Fisheries	John Joncich	185	7
Reefer King	Reefer King Co.	W. D. Suryan	148	7
Sea Lark	Global Fisheries	B. Bendiksen	165	9
KING CRAB OPERATIONS				
Chirikof	Harry Guffey	Same	70	trawler
Deep Sea	Deep Sea Trawlers, Inc.	Same	145	trawler
Nordic Maid	J. E. Shields	Ed Shields	148	trawler
Reefer King	Reefer King Co.	W. D. Suryan	148	trawler

NOTE—Table includes freezerships only; and does not include floating canneries, such as *La Merced, Alaska Queen* and *Cape Douglas. Neva* is included as she is at once a freezership and a floating cannery.

---

an Integrated Operation for Bristol Bay", PACIFIC FISHERMAN, July, 1949; page 23.

"NEVA—Cannery and Freezer", PACIFIC FISHERMAN, October, 1950; page 26.

"Sea Lark," PACIFIC FISHERMAN, May, 1951; page 63; and PACIFIC FISHERMAN'S NEWS, May 4, 1951; page 1.

The operation of these vessels in the salmon fisheries proved that brine freezing of salmon is practicable; and that brine freezing opens the way to handling methods which are expected to overcome the worst problems met by the pioneers.

How the major freezerships entering the fishery this year apply brine freezing and gravity and mechanical handling of fish are the principal theme elaborated in this article.

There are four major newcomers in the field this year—four vessels specially converted to the task they are undertaking. These are being dealt with in some detail below:

ALASKA REEFER

This vessel is a former Navy net-tender, 184′ in length, and owned by John Breskovich, Andrew Vilicich, Nick Jasprica, John J. Petrich and Tony Bulich, chief engineer. She is commanded by Capt. Sig Haavik, who was master of the *Sea Lark* in Bering Sea last season.

She is diesel-electric driven, with twin 700-hp. diesels generating power for a single wheel. Refrigeration system is exceptionally compact for its capacity—freezing and storing of 700 to 800 tons of salmon. It consists of twin 12-cylinder compressors, direct connected to twin 125-hp. Buda diesels. Instrumentation includes Sperry gyro-compass and Wood Freeman pilot.

Before leaving San Pedro, where she was converted, *Alaska Reefer* bunkered 54,000 gals. of Associated diesel fuel at the new Hy-C-Tane station. She also carried 50 drums of Tydol and 10,000 gals. of gasoline for her 10 satellite gillnetters.

Brine freezing aboard the vessel will be accomplished in 12 tanks, eight on deck and four in the lower hold forward. Normal freezing will all be handled in the deck tanks, those in the lower hold being used only during peak deliveries and for topping-off her cargo. Fish frozen in the hold tanks will not be removed until the vessel returns to port, thus avoiding the necessity of handling the fish out of these inconveniently situated tanks.

Fish frozen on deck are brailed into the tanks from gillnet boats alongside. When freezing is complete in a tank, the high-density brine being circulated by pumps during the process, brine is shifted to an empty tank, or dumped, and the fish are withdrawn through ports in the side of the tanks at the bottoms. They are then run by chute to dry storage in the refrigerated holds, on the tweendecks fore-and-aft, and in the lower hold forward.

(It will be noted that handling is by gravity, rather than mechanical. Also that it is necessary to handle or waste the brine in a tank in order to remove the fish.)

The vessel is served by a fleet of 10 gillnetters, 30′ in length, built by Puget Sound Boat Building Co., Tacoma, from designs by James Petrich, its naval architect. They are powered with 90-hp. Nordberg gas

Like a mother duck with her brood on her back—the freezership *Alaska Reefer* at the Puget Sound Boat Building Co. yard, Tacoma, ready to sail for the northern salmon fisheries. She is served by 10 gillnetters.

North Star **is the largest strictly freezership in the Alaska operations and is 220′ length. Once in the Arctic service, she took the last Byrd expedition to the Antarctic. Converted to a freezer by Western Boatbuilding Co., she is served by a fleet of 12 gillnet boats.**

engines working through 1.81:1 reduction, furnished by Carl Harris of the Al-Pac Engine & Equipment Co. The boats are reported to have developed 14 mph.

NORTH STAR

This 220′ wooden vessel has had a colorful story in both the Far North and the Far South. Originally built for the Alaska Native Service, she made annual voyages to the Arctic. Then she was loaned to Admiral Richard Byrd for his last Antarctic expedition.

Supplanted in the Native Service by a modern steel vessel, she was purchased by Martin Petrich and his sons of the Western Boatbuilding Co. Interested with the Petrich family in North Star Fisheries is an Everett, Wash., group for which August Mardesich is spokesman.

North Star is refrigerated by a Latta Bros. absorption refrigeration system in which condensed ammonia is absorbed in water, then liberated by heat to evaporate and produce the refrigerating effect.

Freezing is accomplished in insulated steel deck tanks fore-and-aft; with dry storage in the holds.

System worked-out to reduce the labor and congestion of handling fish, as well as the hang-ups and danger attendant upon this operation at sea, is quite distinctive. Along with the problem of saving labor and blockades went that of saving refrigerated brine. The answer worked out by James Petrich, naval architect for Western Boatbuilding Co. is as follows:

Freezing tanks are situated around hatches giving directly to the refrigerated dry storage holds. Brine

Andrew Vilicich, one of the partners in the freezership *Alaska Reefer*, and a mainspring in her conversion, outfitting and operation. He was pictured at Tacoma as he finished loading the vessel a few hours before her departure for the North.

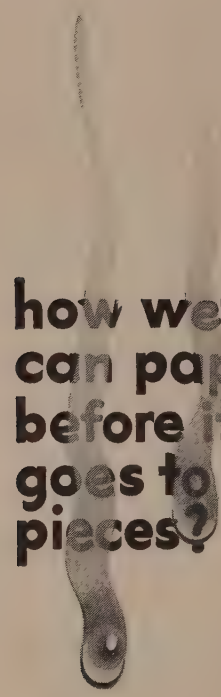
for freezing is introduced at the bottom of the tanks and overflows over a weir at the top into a circulation channel. A propeller, working in the bottom of this channel, drives the brine through race coils and introduces it again into the bottom of the tank.

Essential to the system is an inclined screen which divides the circulation channel horizontally, sloping down from the top level to a point near the bottom of the channel, where a port can be opened into the hatch trunk.

This inclined screen, and all of the many other screens required to keep the fish below the surface of the brine—in which they would float, due to its high density—is composed of heavy galvanized wire and was manufactured by the California Wire Cloth Co. The screens are made by welding to heavy angles, a very large amount of galvanized screening being used through the fish-freezing system.

When freezing of the fish in a tank is complete, the hold-down

These are two of the 10 gillnetters built to fish Bristol Bay for the freezership *Alaska Reefer*. They were designed by James Petrich, naval architect for the Puget Sound Boatbuilding Co., and were built by that yard. The boats are powered with Nordberg gas engines, and turned up 14 mph. on their trials.



how wet can paper get before it goes to pieces?

Soak ordinary paper in water, and what happens? Almost immediately it weakens—disintegrates. Now try Patapar Vegetable Parchment. Soak it as long as you please—even *boil* it. Patapar comes out strong and beautiful.

High wet-strength is just one of Patapar's unique qualities. Another is its ability to resist penetration of grease, fats, oils.

For complete information about Patapar and how it might be helpful in your business, write for booklet T, "The Story of Patapar." This little booklet tells about the manufacture of Patapar, its basic qualities, its 179 different types and its many, many applications. Why not send for your copy today?

Perfect Paper for

Fillet wrappers

Box liners

Dried fish wrappers

Recipe inserts

Frozen fish wrappers

Canned sea food liners

and many other uses

Patapar is furnished plain or beautifully printed in one or more colors.

Patapar REG. U.S. PAT. OFF.
HI-WET-STRENGTH
GREASE-RESISTING PARCHMENT

This Keymark, nationally advertised symbol of wrapper protection, can be included on printed Patapar wrappers

Paterson Parchment Paper Company
Bristol, Pennsylvania
Headquarters for Vegetable Parchment since 1885
West Coast Plant: 340 Bryant Street, San Francisco 7, California
Sales Offices: 122 E. 42nd Street, New York 17, N. Y. • 111 W. Washington St., Chicago 2, Ill.

Toni B., 165′ Bristol Bay freezership, was riding high when this picture was taken at Seattle as she started loading stores for the North. She can carry around 700 tons of frozen salmon if she's loaded to capacity.

screen is removed. Overflow of the floating salmon into the circulation channel is controlled by removing ironbark tongue-and-groove stop-logs from the weir. At the same time, the circulating propellor is stepped-up until it forces the brine out of the circulation channel faster than it flows in. This pulls the brine level below the inclined screen. Thus the overflowing fish fall onto the inclined screen and slide down it to the port into the hatch trunk, through which they are drawn into chutes for delivery to the storage holds.

All refrigeration coils in the brine race and dry storage holds were furnished and installed by Puget Sound Engineering, Inc.

North Star is served by a fleet of 12 gillnetters, both bow-pickers and stern-pickers. Four of the latter were built by Puget Sound Boat Building Co. and are identical with those furnished for *Alaska Reefer*. Four of the stern-pickers were from the Fletcher Bay Boat Works and are powered with Universal "Cruiser" sixes. Johnson Manufacturing Co. built several, powered with Universals.

TONI B

Originally an *ART*—fleet rescue tug—*Toni B.* was identical with *Sea Lark* and *Scarlet Queen,* largest vessels in the tuna fleet, the former doubling as a Bristol Bay freezership this season after landing the largest trip of tuna ever taken. She is 165′ in length and powered with a 900-hp. General Motors Cleveland diesel started with a Gardner-Denver air motor. Auxiliaries include five General Motors Detroit diesels started by Ingersoll-Rand air motors. Two of these "Jimmies" drive 75-kw. generators and three turn the vessel's big 10 x 10 Worthington compressors through 10-strand Gates V-belts. There is also a 5½ x 5½ compressor. The refrigeration system was furnished and installed by Puget Sound Engineering, Inc.

Capt. John Bez, master of the freezership *Toni B.*, pictured aboard his vessel just before she left Seattle for Bristol Bay.

Toni B. is owned and operated by Trans-Pacific Fishing & Packing Co., whose principals are Nick Bez and John Bez, his son, who is in charge of this enterprise.

The vessel is served by 12 gillnet boats of 32′ built by Bryant's Marina and powered with 95-hp. Chris-Craft engines. They are exceptionally rugged fishing craft and are equipped with hydraulic-powered net rollers actuated by Vickers pumps.

Frozen salmon capacity of *Toni B.* is figured at about 700 tons. The fish are frozen in cory-insulated steel tanks on her after deck. The main freezing tank installation consists of six compartments, divided longitudinally by coil races in which 12 x 12″ marine propellers driven by V-belts maintain circulation of the low-temperature brine. The brine circulation system was designed by Worthington engineers.

The brine is circulated aft through the race coils, entering a freezing compartment at a corner. Outlet opening in the compartment bulkhead is opposite, forcing the brine to flow diagonally through the fish.

Each freezing compartment is fitted with a false bottom consisting of heavy screen and welded angles, and equipped with hoisting bails which meet in the center of the tank just above the level of the brine, and into which the boom tackle is hooked.

While the frozen fish tend to float

Bryant-built 32′ Bristol Bay gillnetter powered with a 90-hp. Chris-Craft gas engine. Fishing boats of this type comprise the fleets fishing for the freezerships *Toni B* and *Sea Lark*.

CONGRATULATIONS to the Bristol Bay Freezerships—

WORTHINGTON

REFRIGERATION

AND AIR CONDITIONING

Sales and Service

FRANCHISED DISTRIBUTOR

★ **TONI B** We supplied her complete refrigeration system, including three 10 by 10 Worthington ammonia compressors; race coils for freezing tanks; and holding coils for the hold.

★ **NORTH STAR** Race coils for this vessel's freezing tanks and holding coils for her hold were of our manufacture.

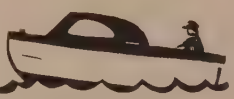
★ **SUNDOWN** In addition to the freezing tanks and race coils for this freezership, we also equipped the 72-foot "Paul L", which serves the "Sundown", with a Worthington Freon refrigeration system for frozen fish storage.

PUGET SOUND ENGINEERING, Inc.

3838 10th Ave. N.E. SEATTLE 5, WASHINGTON EV. 2500

EXTRA

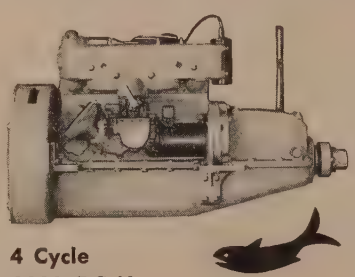
features of the



LATHROP LH-4

give extra long life, extra economy

Fully enclosed, extra-large balance wheel for smooth performance at all speeds. (Ideal for trolling.) Latest design economy carburetor. Thick water jackets. (Some of the 1936 Model LH-4's are still in service.) Power take-offs, reduction gears and high tension magneto available as extra equipment. Be sure to Look at a Lathrop before you buy.



4 Cylinder • 4 Cycle

45 HP. at 2800 R.P.M.

Bore: 3¼" Stroke: 4" Weight: 440 lbs.

WRITE FOR CATALOG

IMMEDIATE DELIVERY

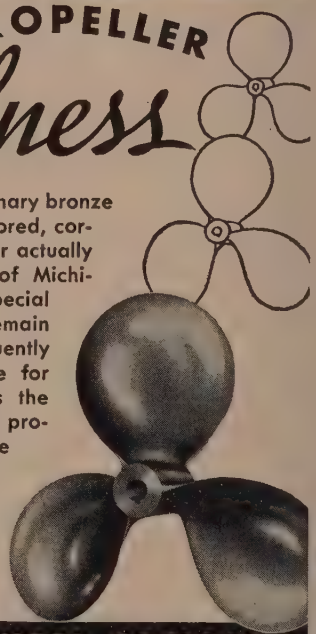
19 Different Models • Gasoline & Diesel • 20-220 HP.

THE Lathrop ENGINE CO. MYSTIC, CONNECTICUT

SINCE 1897 MANUFACTURERS OF RELIABLE MARINE ENGINES

MICHALLOY-K

TRIPLES PROPELLER *usefulness*

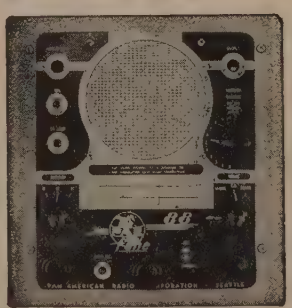


Where ordinary bronze propellers become discolored, corroded, nodule covered, or actually disintegrate, propellers of Michigan Wheel Company's special alloy—"MICHALLOY-K" remain sleek and bright . . . frequently providing perfect service for as much as three times the useful life of the ordinary propeller. For economy's sake and by far the finest performance you've ever experienced get a MICHIGAN WHEEL with "K" stamped on the hub.

MICHIGAN WHEEL COMPANY

GRAND RAPIDS 3, MICHIGAN

PAR VALUE—*PLUS* PAR PERFORMANCE



(Actually smaller than this Page)

PAR-fone "85-X" ⟶

New 1951 Model of America's finest radiotelephone . . . 30-40 watts Actual Antenna Power . . . Complete Indication of Performance . . . Full Output under All Conditions . . . Optional—New High Frequency Channel.

⟵ **PAR-fone "88"**

Compact, Dependable Units for Marine or Land Use . . . Low Drain—Very Simple to Install and Operate . . . Dynamotor Power Supply for 6-12-32 Volts. Available for Dry Battery Use.

Contact your PAR dealer now.
Present prices cannot be guaranteed.

PAN AMERICAN RADIO CORP.

5210 Ballard Cable "PARAD." SEATTLE 7, WN.

up in the high-density brine used for freezing, the false bottom insures positive action, and permits men to get into the fish and push them over the side of the compartment into chutes as the load of fish is raised gradually out of the compartment. Chutes carry the frozen fish to dry storage in the refrigerated holds. The system is expected to reduce manual handling to a minimum, and to eliminate waste or excessive handling of refrigerated brine.

Capt. Dan Luketa, right, master and managing owner of the freezership *Sundown*, with Capt. Paul Constantine, skipper of the Paul L.

SUNDOWN

This Luketa-owned freezership is a former Army *FS* vessel, built by Western Boatbuilding Co., Tacoma, from H. C. Hanson design. She is 115′ in length and powered with twin 230-hp. Atlas diesels. Equipment includes a Bludworth direction finder, Atlas compass and Northern radio.

The vessel is operated by Sundown Fisheries, an enterprise of Luketa Bros., Seattle. Dan Luketa is master of the vessel; Pete Snyder is chief engineer and Bob Morlay assistant.

Sundown is refrigerated by the absorption system, Latta Bros. equipment. Puget Sound Engineering, Inc., furnished the two compartmented brine tanks, one on either side of the main hatch forward, together with their brine race coils.

Method of handling the fish is as follows:

Each compartment of the brine tanks is fitted with a heavy perforated basket which can be raised in the tank by the boom tackle. The basket is open at the top and on the side facing the hatch.

Fish are brailed into the baskets in the brine tanks direct from the gillnet boats alongside. When the fish in one compartment are frozen the cover is removed and the basket is raised gradually by the boom tackle, the frozen fish being raked out of the basket into a chute in the hatch which directs them to storage in the refrigerated hold. Principal storage is in the main hold forward; but there is additional storage aft, to which the fish are carried by chute.

The Luketa freezership *Sundown*—before she had received her foredeck freezing tanks—with her satellite tender *Paul L.* lying alongside.

Frozen fish capacity of *Sundown* is approximately 200 tons, but the expedition's capacity is raised to 250 tons by an additional 50 tons frozen fish capacity aboard the *Paul L.*, another of the Luketa fleet of seven vessels, which will accompany and serve *Sundown*. Paul Constantine is master of *Paul L.*, which was refrigerated with a Worthington freon system installed by Puget Sound Engineering, Inc., just before she left for the North.

Sundown will be supplied by four new, powered gillnetters, two built by Fletcher Bay Boat Works and Chambers & Frank Boat Co., Seattle.

Three other freezerships operating in Bristol Bay this season are *Alert*, *Great Sitkin* and *Michelle Eve*. The first two are owned by O. L. Grimes. *Alert* is a venerable tuna clipper, 92′

Here's a Bristol Bay gillnetter of the type fishing for *Sundown*, and which makes up part of *North Star's* satellite fleet. These boats are 30-footers, built by Fletcher Bay Boat Works, and are variously powered with Universal and Chrysler gas engines.

This is the way they stow the boats—on *Sea Lark* at any rate. It's no small task to put nine husky 32' Bryant's Bristol Bay gillnetters aboard the mothership, but that's what was done on *Sea Lark*.

in length, and commanded by J. Kristensen. During the Copper River salmon season in May and June, she operated there; shifting later to Westward.

Alert, Great Sitkin And Michelle Eve

Great Sitkin is a former military power scow, since refrigerated. She is powered with a pair of 135-hp. "Caterpillar" diesels and is in command of Nick Koster. The *Alert* and *Great Sitkin* expected to work together, operating as a team, and pooling the production of their combined fleet of 5 to 7 fishing boats.

Michelle Eve is a former 136' minesweeper, converted and refrigerated by Malaspina Fisheries Co., whose principals include Karl Paulus, John and Joseph Jones and Ralph Ostrem. Original intention was to send the vessel to Bristol Bay on an operation for the Malaspina company, but this firm's gillnet boats are being fished by the *Toni B.* and the *Michelle Eve* was chartered to John E. Niemi of Ilwaco, Wash., who took her to Nushagak for the early King salmon season there. Before the Red salmon season opened, she put up a pack of hard-salted Kings in tierces. This fish will be distributed by Gordon Davis of Bunzen & Davis, Seattle.

It was expected when she left that after the King season the *Michelle Eve* would freeze a load of Reds for canning. She is equipped with brine freezing tanks and refrigerated holds.

Neva, Pacific Queen Reefer King, Sea Lark

Four big floaters—*Neva, Pacific Queen, Reefer King,* and *Sea Lark* —are back in Westward Alaska waters again this season.

Reefer King was the pioneer of the modern freezerships in Bristol Bay, followed in 1949 by *Pacific Queen. Sea Lark* worked there in 1950, proving the applicability of brine-freezing to the problem. During the off season she fished tuna —for she is in fact an all-brine tuna clipper—and took the largest trip ever landed in California. She is served by 9 Bryant-built gillnetters powered with 95-hp. Chris-Craft engines. *Sea Lark* is Carrier-refrigerated.

Neva is the largest freezership of all, an LST converted by Pacific American Fisheries, Inc., and outfitted both as a cannery and freezership. She went north early this season, basing her first 1951 operation on False Pass.

Pacific Queen is now on her third Bristol Bay season, being served with 7 gillnetters converted to power from her former sail boats by Johnson Manufacturing Co. They are powered with Lathrop LH-Master gas engines. With *Neva* and *Reefer King,* she represents the sharp-freezing technique rather than the newer brine-freezing system.

Reefer King actually is on her second trip of the year, having made an earlier voyage to Bering Sea on a King crab trawling trip. Returning to Seattle June 8, she discharged 250,000 lbs. of frozen King crab meat and then loaded her supplies, boats and gear for a fast turn-around and return trip to Bristol Bay in time for the salmon fishing.

George Kearney, left, and R. D. Suryan of the freezership *Reefer King*, which pioneered the Bristol Bay freezer field, reached Seattle June 8 with 275,000 lbs. of King crab meat from Bering Sea, took five gillnet boats and supplies aboard, and made a quick turn-around, heading back to Bristol Bay. Their boats are unique in the fleet in that they are diesel-powered, using Lister-Blackstone 14-hp. engines.

STANDARD ENGINEER'S REPORT

DATA

PRODUCT: Standard Diesel Fuel

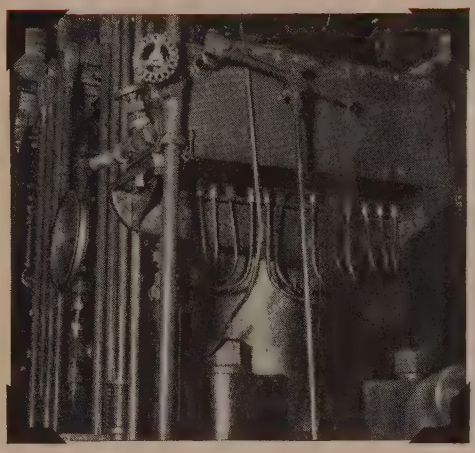
UNITS: 125 H.P. Atlas diesels

CONDITION: Fishing off Pacific Coast — bottom fish

PERIOD: 15 years

FIRM: Consolidated Fisheries, Inc., San Francisco

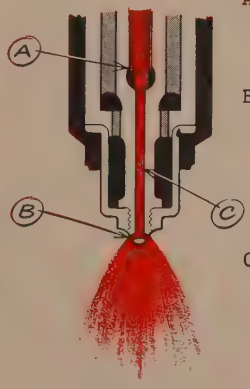
No diesel fuel-system trouble in 15 years of fishing!



FUELED WITH STANDARD DIESEL FUEL SINCE 1936, this engine in Consolidated Fisheries' trawler Crescent No. 2 has been in tough coastal fishing service all that time without fuel-system trouble. Injectors have received only the usual checking and cleaning. (The two other boats in Consolidated's fleet have operated for shorter periods with the same record.) Engines are worked hard. The 60-foot boats fish some 600 miles of coastal waters, buck tides and often heavy weather with catches weighing up to 10,000 pounds.

SPECIAL PRECAUTIONS are taken on these boats to keep fuel from being contaminated with dirt, grit and water, thus eliminating much of the cause of excessive wear on diesel engine fuel parts. Standard Diesel Fuel is delivered to you 100% clean through special handling. Keep it clean and you will cut maintenance costs.

How Standard Diesel Fuel cuts repairs and ups engine efficiency



A. Complete distillation and 100% cleanliness prevent wear of fuel-system parts.

B. Proper ignition quality provides even burning and sustained power with minimum combustion shock, quick starting and smooth idling.

C. Has correct viscosity to provide lubrication of fuel-system parts—assures less wear, minimum leakage and clean injection cut-off.

FREE FOLDER on Standard Diesel Fuel, and Standard Automotive Diesel Fuel for certain high-speed engines that require a premium quality high-cetane fuel. Gives complete information, tells how to keep fuel clean. Write or ask for it today.

STANDARD DIESEL FUEL

TRADEMARK REG. U.S. PAT. OFF.

STANDARD TECHNICAL SERVICE checked this product performance. For expert help on lubrication or fuel problems, call your Standard Fuel and Lubricant Engineer or Representative; or write Standard Oil Company of California, 225 Bush St., San Francisco.

STANDARD OIL COMPANY OF CALIFORNIA

Insure "Fresh Today" appearance . . . with Pfizer Ascorbic Acid

Fish packed in transparent packages *sells on sight* when treated with Pfizer ascorbic acid. For ascorbic retains that appetizing "deep sea" appearance of fresh fish . . . puts real buy-appeal in your pack.

Pfizer ascorbic acid used alone or in combination with citric acid works two ways to keep your fish package saleable:

1. it prevents brownish "rusting" of the fatty portions, preserving the natural color of the fish.

2. it combats the development of rancidity and unpleasant flavor resulting from atmospheric oxidation.

Food in transparent packaging sells on sight *only* when the contents look good to eat. Easy-to-use Pfizer ascorbic is your assurance that your fish will live up to the promise of the package.

For further information, samples and prices, just drop us a line.

PFIZER

ASCORBIC ACID

For the Frozen Food Industry—Ascorbic Acid, Ascorbic-Citric Mixtures • **For the Dairy Industry**—Vitamin A, Sodium Citrate and Ascorbic Acid • **For the Milling Industry**—Bi-Cap® Enrichment Concentrates • **For the Baking Industry**—Enrichment Wafers, Glucono delta lactone and Fumaric Acids • **For the Feed Industry**—Bi-Con® Terramycin and Vitamin B_{12} Supplements, Vitamins and Iodides.

CHAS. PFIZER & CO., INC., 630 FLUSHING AVE., BROOKLYN 6, N. Y.; 425 NORTH MICHIGAN AVE., CHICAGO 11, ILL.; 605 THIRD ST., SAN FRANCISCO 7, CALIF.

WONDERFUL WORLD

The United States took the lead in negotiating with Mexico and Costa Rica treaties providing for scientific study of the Pacific tunas under the direction of an international commission. The commission held its first meeting last summer, and early this year appointed a director and moved to initiate its program of research.

Here is an international enterprise which follows the pattern of the Halibut Treaty and the Sockeye Salmon Treaty with Canada, in that it seeks the facts of international fisheries by means of scientific research; seeks facts in the interest of conservation.

The Halibut and Sockeye Salmon treaties were enacted to study sick fisheries and to determine means by which they could be restored to health.

The Tuna treaties differ from their forerunners in this fundamental: they were designed to study a great international fishery resource scientifically before it has suffered damage; to examine the effect of fishery upon the tunas, and if possible, to find the factors by which that effect can be measured and adverse influences avoided.

A laudable undertaking—but nothing has been done. Why? Because Congress and the Administration have failed to provide any funds by which the Inter-American Tropical Tuna Commission can function. Its scientists have not been paid. Its every move has been blocked, while Congressmen have quipped in committee about spending money to "study the love-life of a fish."

At the very time when the Administration could not provide funds—some $300,000—for the Inter-American Tropical Tuna Commission, another branch of the Administration—the Economic Cooperation Administration—was making an *outright grant* of $1,368,000 to the Indonesian government for development of its fishing industry.

Almost simultaneously it is announced that E.C.A. is making a *grant* of $700,000 to Portugal as 55% of the cost of a "hospital-tender" for the benefit of "Portuguese fishermen operating on the Atlantic fishing banks off Newfoundland and Greenland." (Do American fishermen in those same waters enjoy the benefits of a "hospital-tender"? No. The United States can't afford one.)

Official text of the E. C. A. announcement of the grant to Indonesia says:

"Another step in the development of Indonesia's fishing industry will be taken with the procurement in the United States of a clipper-type tuna fishing vessel capable of carrying 75 tons of tuna and two 50-ton fish-carrying vessels from The Netherlands, for which the expenditure of $270,000 was authorized today.

"In the last six months E. C. A. has authorized $1,368,000 in U. S. aid funds for Indonesian fishery development. With the funds Indonesia is also buying 60 small motorized fishing boats and 100 new engines from Japan for $600,000; 15 larger type boats from Japan for $225,000; a fisheries research vessel from The Netherlands for $225,000; and scientific equipment for it costing $18,000." (Note that E. C. A. is buying a research vessel for the Indonesians, when there are no funds for Inter-American tuna research. Note also that only one of these expenditures is being made in the U.S.)

In explaining the functions of the Portugese hospital-tender, E. C. A. says: "A service vessel for medical purposes as well as for supplies is essential. . . . In addition to delivering mail, the hospital-tender also broadcasts Sunday mass service to the men of the fishing fleet."

In explaining its grant to Indonesia's fishing industry, E. C. A. says in part "To reach the rich tuna fishing grounds already known, Indonesian fishermen need larger clipper vessels such as are used in high seas tuna fishing by American tuna fishermen."

Funds for funny foreign purposes —none for Inter-American research.

Fish Packers Active in National Canner's Affairs

Arthur W. Wittig, Port Ashton Packing Co., Seattle, and Dr. E. D. Clark, director of the Northwest Branch, Nat'l. Canners Assn., were among the Pacific Coast men attending the recent meeting of the board of directors of the N.C.A.

Beside Mr. Wittig, other Pacific fish canners on the board are:

S.A. Ferrante, Oxnard Canners, Inc., Monterey, Calif.

J. D. Hendrickson, Columbia River Packers Assn., Astoria, Ore.

Albert Vignolo, Jr., West Coast Packing Corp., Long Beach, Calif.

Pacific fish packers on the N.C.A. Fishery Products Committee include:

W. Wade Ambrose, Westgate-Sun Harbor Company, San Diego, Calif.

Milton G. Brown, Ellamar Packing Co., Inc., Seattle, Wash.

H. B. Friele, Nakat Packing Corp., Seattle, Wash.

Phelps Hollywood, Carmel Canning Co., San Francisco, Calif.

D. P. Loker, French Sardine Co., Inc., Terminal Island, Calif.

Arthur H. Mendonca, F. E. Booth Co., Inc., San Francisco, Calif.

D. T. Saxby, California Packing Corp., San Francisco, Calif.

Anton Sorensen, Union Fishermen's Cooperative Packing Co., Astoria, Ore.

Vance F. Sutter, Fidalgo Island Packing Co., Seattle, Wash.

Norman Jarvis Assigned To Duties in Peru

Norman D. Jarvis, for many years a technologist with the U. S. Fish and Wildlife Service, and at one time a technology instructor on the faculty of the University of Washington School of Fisheries, has been assigned to the staff of the U. S. Fisheries Mission to Peru for a period of about six months.

Mr. Jarvis is one of the most experienced technologists specializing in Pacific and tropical fisheries, and is the author of "Principles and Methods in the Canning of Fishery Products" 1943; and the more recently issued "Curing of Fishery Products," 1950—the two standard works on these subjects.

THERE ARE FISH . . .

AND FISH . . .

BUT THERE IS ONLY ONE

Gold Medal Netting

Experienced fishermen know that Gold Medal Netting is the finest quality netting—that it *holds* the fish it catches. And that's why successful fishermen have depended on Gold Medal for well over 100 years.

Ask your supplier—ask your friends—they'll all tell you there's no finer netting made than Gold Medal.

GOLD MEDAL
The greatest name in netting

GOLD MEDAL NETTING means controlled production in our own plants, from the bale of cotton to the finished netting. This is your assurance of dependable quality.

Gold Medal Netting

Makers of fine netting for 109 years

THE LINEN THREAD CO., INC., 116 New Montgomery St., San Francisco 5, Calif.
(Successors to American Net and Twine Company)

Pacific Coast Distributors: Pacific Marine Supply Co., Seattle • Oregon Marine Supply Co. Portland and Astoria • Cincotta Bros., San Francisco and Monterey • Marine Hardware Co., San Pedro and Terminal Island • Nuttal-Styris Co., San Diego • Cia Exportada del Sur, S. A., Guaymas, Sonora, Mexico.

Canadian Representative: Western Leckie Limited, Vancouver, B. C.

GOLD MEDAL SEINE TWINE—For hand-knitting, hanging and mending, get the same high-quality twine that Gold Medal Netting is knit from. Ask for and be sure you get Gold Medal.

Other Netting Products: AN&T Coy Linen Netting—Gold Medal Sea Island Cotton Gill Netting—Barbour's Nylon Netting—Plymouth Rope—A complete Line of Netting Accessories.

DANGERS IN EXCESS —

Plain Lessons From the Copper River

Dangers inherent in excessive fishing effort—dangers to earnings as well as to the resource—were evident in the situation which developed on the Copper River in May and June; and which appeared to be developing on Bristol Bay as this issue went to press.

That it would develop later on Cook Inlet was a foregone conclusion.

More than 600 boats massed on the Copper River this spring, compared with 400 in 1950 and a pre-1950 average of 180 to 200.

Danger to the run was obvious, and the Fish and Wildlife Service early in the season added 24 hours to the weekly closure, leaving only 72 hours open for fishing.

Danger to the run may have been in part avoided by the closure, but the economic danger in excessive fishing effort persisted. Best figures available at presstime indicated the pack was only about 39% that of 1950 to even date; and about 56% that of 1949.

Effort and cost expended to attain this reduced pack, however, was 150% that of 1950 and 300% that of 1949.

From this it will be obvious that the average individual fisherman found pretty slim pickings on the Copper River flats this season. Fact that the established operations of the Copper River district got the lion's share of the fish gives strong evidence that the outsiders rather than the resident fishermen were those who suffered most.

It is a known fact that much of the excess of gear found on the Copper River this season came from outside the district—part of it in admitted retaliation for movement from Copper River to Cook Inlet last season; and for the fact that it was Copper River opposition which led the Defense Fisheries Administration to abandon its "concentration" plan which would have tended to control excessive shifts of gear.

A dangerous situation developed on Bristol Bay in June as result of the dilatory tactics of the National Labor Relations Board, which stalled and stuttered and refused to act over a long period of months. The issue was clear-cut all this time, but N.L.R.B. was seeking a solution which would not be politically unpopular with either the Alaska Fishermen's Union or the new Bering Sea Fishermen's Union which was trying to supplant the older A.F.U. as the bargaining agent for the Bristol Bay fishery.

The salmon packers were caught in the bight of the line. Far in advance they had signed a contract with the Alaska Fishermen's Union, but with only days to go before the opening of the season their canneries were being picketed and ships prevented from unloading cargo.

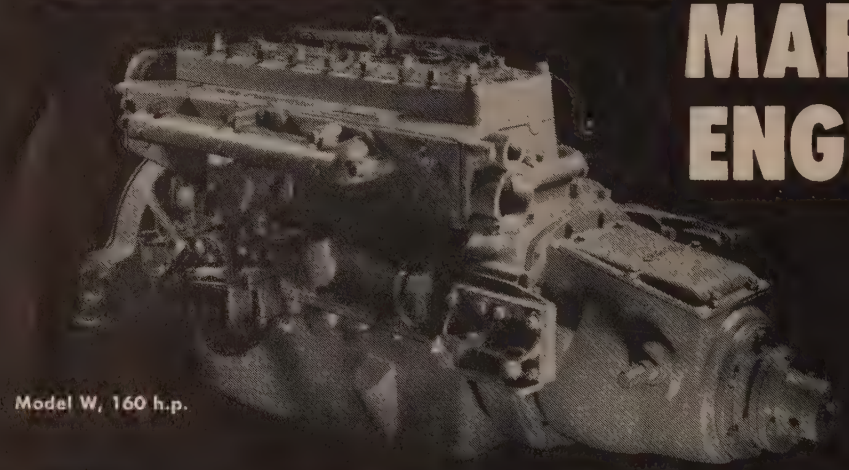
In Washington at presstime the Armed Services were restive, and wondering where their 360,000 cases of Red salmon were to come from. Wage Stabilization Board and Defense Fisheries Administration were looking into the matter. Labor Relations Board continued to temporize, hoping that something would save it from the necessity of making a choice between the organizations backed by Harry Bridges on the one hand and Harry Lundberg on the other.

Comparatively unnoticed in the hue and cry about the crisis on Bristol Bay, another labor fracas flared in Ketchikan in June. The I.L.W.U.—sponsored seiners group picketed Ketchikan canneries long in advance of the operating season. Only one badly hurt was New England Fish Co., whose cold storage was shut down in the midst of the halibut season by the picket line thrown around the entire plant. A restraining order was sought and secured in the federal court at Juneau, enjoining the picketing as a secondary boycott, and as otherwise illegal in seeking to force the canners into negotiations counter to the anti-trust laws as interpreted by the United States supreme court in upholding convictions of California labor leaders.

Anti-picketing injunctions were subsequently secured by other Ketchikan district canners, including Wards Cove Packing Co., Nakat Packing Corporation, Fidalgo Island Packing Co., Ketchikan Packing Co., and Libby, McNeill & Libby.

The 85' cannery tender *Glenwood*, Pacific American Fisheries, Inc., Bellingham, Wash., was repowered recently by an 8-DCMR Buda diesel, 240-hp. at 900 rpm., driving through a 2 to 1 Western marine gear, turning a 52" Coolidge propeller. A Gardner-Denver air motor is used to start the Buda diesel. The vessel made 10½ knots cruising on her trial run just before leaving for PAF's King Cove cannery.

NOW! THE WORLD'S LARGEST BUILDERS OF MARINE ENGINES



Model W, 160 h.p.

. . . completely marine!

Model B, 60 h.p.

Model K, 95 h.p.

Model KL, 105 h.p.

MARINE ENGINEERED! From drawing board to final assembly, Chris-Craft Marine Engines are designed, engineered and built to minimum over-all dimensions by marine experts for marine use exclusively! That's why a Chris-Craft is the finest marine engine money can buy!

MARINE TESTED! In Chris-Craft's own marine engine laboratory, the most comprehensive of its kind anywhere, Chris-Craft Marine Engines are thoroughly tested for positive assurance that they'll deliver smooth, dependable marine power under the most rugged operating conditions.

MARINE PROVED! These great engines have been acclaimed for economy, dependability, performance and long life by engine experts and by the thousands and thousands of owners and operators of Chris-Craft Marine Engines in commercial and pleasure craft of all kinds.

FOR MARINE USE, you can't buy a better marine engine *anywhere* than a Chris-Craft—built and backed by the world's largest builders of marine engines. World-famous quality at no premium in price! For complete data, see your marine dealer or write for FREE catalog. Act NOW!

BUY CHRIS-CRAFT . . . world's finest marine engines for *any* marine purpose! Available in 60, 95, 105, 120, 130, 131, 145, 158 and 160 h.p. with reduction drives and opposite rotation for most models. Buy NOW!

Chris-Craft

CHRIS-CRAFT CORPORATION, ALGONAC, MICH.

MOTOR BOATS • MARINE ENGINES • OUTBOARD MOTORS • BOAT KITS

Model KBL, 131 h.p.

Model M, 130 h.p.

Model ML, 145 h.p.

Model MBL, 158 h.p.

More Moorage For San Diego Fleet

San Diego's commercial fishing fleets are gradually acquiring adequate mooring and docking facilities. Soon the huge tuna clipper fleet will have its own location. Two years ago the harbor department provided docks for the San Diego Commercial Boat Owners' Association, for vessels under 65′ in length.

Another project for take care of the smaller vessels is under way, called Anchorage, Ltd., situated on Harbor Drive, adjacent to Harbor Boat & Yacht Company yard. Owned by Dale Watts and associates, Chick Rollins is manager.

Considered one of the most modern projects of its kind on the coast, the Anchorage will moor 100 boats up to 55′ at finger piers held by new concrete-type pontoons. Facilities include a fueling dock, fishermen's lockers and showers, electricity and fresh water and ice-crusher service.

N.F.I. Top-Level Personnel Changes

Several personnel changes in the top-level of the National Fisheries Institute staff occurred during May.

Ray Steele, who has been counsel and assistant manager since organization of the Institute, opened his own law office in the Edmonds Building, Washington. He will continue to serve N.F.I. as counsel; and will handle its traffic problems. Associated with him in private law practice is Miss Bette Guhring, his former secretary, now a member of the bar.

The N.F.I. office at San Francisco, having fulfilled its function of consolidating Pacific membership, is being closed and Mal Xavier, who has been in charge, is transferring to Institute headquarters in Washington to assist in its general program.

Harold H. Horchover, Halferty Executive, Dies

One of the notable younger executives in the Pacific fisheries was lost to the salmon industry in May when death removed Harold H. Horchover, vice president of G. P. Halferty & Co., and assistant secretary-treasurer of Whiz-Halferty Canneries, Inc.

Mr. Horchover was a native of Portland, Ore., and had lived in Seattle about 25 years, during most of which he had been identified with the salmon industry.

Wilbur-Ellis Co. recently purchased the refrigerated motor ship *Spicewood* from Van Camp Sea Food Co. The craft later discharged 600 tons of Peruvian tuna and swordfish at Long Beach. Wilbur-Ellis Co. has been operating the reefer ship under charter from Van Camp, making one trip from Peru to Boston, Mass., and two voyages from Peru to Long Beach. Most of the cargo is tuna, but a portion is swordfish. *Spicewood*, a converted Navy net tender, is 181′ long, and has a capacity of 600 tons of refrigerated cargo.

Tuna Clipper Fishing Good But Seine Sets Yield Little

Southern California tuna plants received a total of 12,694 tons during May and processed 613,385 cases. San Diego flumed 5,847 tons; Los Angeles- Long Beach 7,847 tons. Deliveries were from all sources, clippers, seiners and raw-fish imports.

After yielding first place in tonnage to Skipjack since fishing was resumed in 1951, Yellowfin was in front again with 6,221 tons of the total. Raw imports from various sources totalled 1,517 tons, of which all but 30 tons—Japanese Albacore—was delivered to the LA-LB district.

Of May's balance, 10,000 tons was flumed from clippers; the balance from purse seiners. Imports were: Peru, 749 tons; Japan, 423 (all Albacore); Costa Rica, 247 tons; Panama, 163 tons.

Purse seiners were finding the 1951 season a poor one, although in a few cases, such as the *Anthony M.* good catches were recorded. However, of the several score netting vessels operating, mostly off Mexico, the yields had been far below expectancy. Seiners made 41 deliveries in May.

Tuna clippers, beginning to complete the first cycle of trips for 1951, were finding much better fishing, particularly in far-southern waters. Many hook-and-liners made fast trips. One outstanding delivery was by the new 122′ steel clipper, *Challenger*, from Avondale Marine Ways, New Orleans, that unloaded a record—for this size clipper—of 149¼ tons at French Sardine Company.

From a tonnage standpoint the Southern California fleet was dropping behind last year for the five-months period. For 1950 the gross tonnage was 57,840 tons this year to June 1.

May was a big month last year, 19,608 tons. This year the tonnage was 12,694, a drop of nearly 7,000 tons.

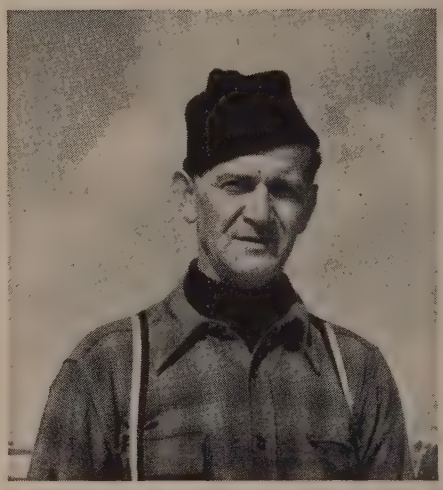
No Albacore was reported in local waters by June 1, although small boats from all along the Pacific coast were beginning to arrive at San Diego. It was estimated on that date there were over 50 northern vessels.

No raw price had been set for the Longfins, and would not be until the run started which, if last year's experience was a guide, would be in early July. The Bluefin season was almost a complete failure.

SKIPPER TOM MASON, owner of the San Pedro seiner *City of Stockton*, has sold her to *Luigi Luce*, owner of the *New Esperia*. Mason, in turn, bought the latter, renaming her *Sea King*. On the other hand, Luce will rename the *City of Stockton* the *New Esperia*.

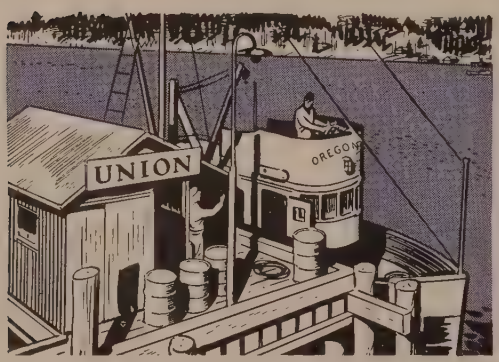
T5X WON'T BREAK DOWN!

4500-hour overhaul proves superiority of amazing purple oil

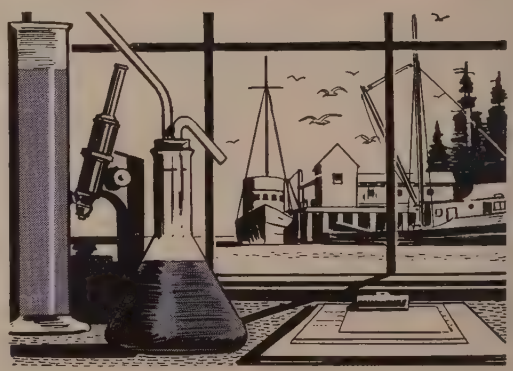


Martin Skrivanich is owner and captain of the OREGONIAN, a 65-ft. purse seiner and beam troller operating out of Gig Harbor, Washington. The boat is powered with a 115 h.p. Caterpillar motor that has been lubricated exclusively with T5X—*the amazing purple oil.*

The motor of the OREGONIAN was given a complete overhaul after running 4500 hours. Skipper Skrivanich says: "We found the engine in very good condition. All the rings were free and clean, having very little wear. The bearings were all O.K. and did not need replacing."



T5X is the famous *heavy-duty* oil that's specially designed to do an outstanding job under *any* operating condition, no matter how severe. T5X contains a powerful combination of additives that enable it to resist oxidation, corrosion, and acid action. Sludge formation is kept at an absolute minimum.



T5X is often called "grapejuice" or "blueberry juice" because of its *purple* color. This distinctive color came from an exclusive combination of compounds which gave the oil its amazing stability. T5X does not break down under long hours of continual heavy load. This means increased engine efficiency for your vessel—less wear and lower maintenance costs.

You can get T5X at any one of the Union Oil marine stations located in key Pacific harbors from Alaska to Panama.* Next time, tie up at the sign of the orange-and-blue 76.

UNION OIL COMPANY OF CALIFORNIA 76

*Union Oil marine products are also available in most principal west coast ports throughout Central and South America and in the Far East.

How California's First Tuna Was Packed and Sold in 1908

"Looking through some old files," recently wrote William Seeman, head of Seeman Bros., Inc., New York food distributors, to W. Wade Ambrose, president of the Westgate-Sun Harbor Co., San Diego, I came across a letter written to my father on August 14, 1929, 21 years ago, by the PACIFIC FISHERMAN, a West Coast publication which covers the fishing industry. I quote from this letter as follows:

"In the September issue of PACIFIC FISHERMAN, we are preparing to include a special section devoted to the tuna industry of California, telling the story of tuna in a popular style and in sufficient detail to give a comprehensive view of the business.

In the course of the writer's discussions with various tuna packers, you were mentioned as the man who was most instrumental in getting tuna started on the market; and I believe it would be appropriate to include in the section some remarks or reminiscences from you as to the introduction of tuna to the trade and consumers, and its rapid rise to popularity as soon as it became known."

S. W. Seeman, then head of Seeman Bros., New York food distributors, who marketed the first California tuna in 1908 against overwhelming obstacles.

The Tuna Story Unfolds

In response to this request, my father, S. W. Seeman, furnished the PACIFIC FISHERMAN with the story which follows:

Robert D. Wade, whose courage and determination to put tuna canning across, in 1908 produced the first pack from which has grown a great industry.

"Up to about 1908, domestic Tuna Fish or Tunny Fish was unheard of as a commercially canned product. I, myself, had never heard of it and do not believe anybody else had either because it had never been packed. About this time, into my office came a most interesting type of man. I had not known him and he had never known me, but he had come East with the idea of selling a product that he thought could be packed and introduced successfully. He was really looking for an angel to back him and I suppose he came into our office because we were very well identified in the East then as well as now, with the fancy Canned Salmon and Fish business. This man was the late Captain Halfhill, father of Charles and Harry J. Halfhill, who now run a packing company at Long Beach, California under that name.

Process Discovery Accidental

"He had but very few samples of this product with him and although I saw possibilities in the product, I wanted to know what the outlook was for securing supplies should a demand be created. When he told me these fish were all caught by hook and line, I had grave doubts of anyone ever being able to secure sufficient to make a commercial success of it. Inci-

ASK THESE 10 QUESTIONS

before you buy a diesel engine!

1 Is it a "true" diesel?

2 Does it have unit fuel injection?

3 Does it have four valves per cylinder?

4 Does it have distortionless pistons?

5 Does it have interlocking rods?

6 Does it have an extra heavy crankshaft?

7 Does it have dual overhead camshafts?

8 Are the camshafts driven from the flywheel end?

9 Does it have an integral hydraulic servo-type governor?

10 Is the cylinder block symmetrical?

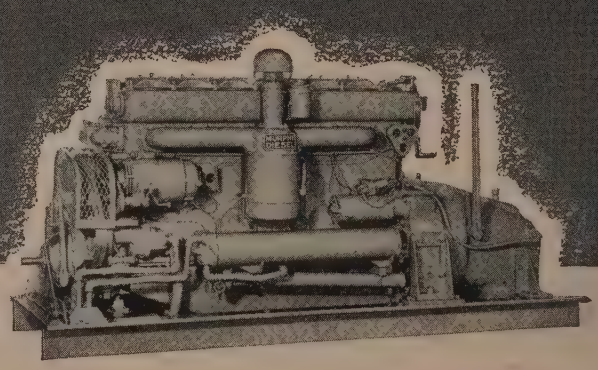
ASK these questions of any diesel engine salesman and you'll find that only the Murphy Diesel Salesman can answer "Yes" to all of them. From an operating standpoint ten "Yeses" mean you'll get more power, greater economy, greater dependability and longer engine life . . . just what you get with Murphy Diesels. Full information is given in the booklet *"10 Questions to Ask a Diesel Engine Salesman."* Ask your Murphy Diesel Dealer for a copy or write direct.

MURPHY DIESEL

Heavy duty power

for fishing

Murphy Diesel marine propulsion engines and auxiliaries are made in sizes from 90 to 205 H.P.; marine type generator sets from 60 to 140 K.W.



MURPHY DIESEL COMPANY

5301 W. Burnham St. Milwaukee 14, Wis.

Sales, parts and service in principal centers

SAN FRANCISCO 9, CALIF.—Oswald Machine Works, 2936 Hyde St.
SAN DIEGO, CALIF.—Diesel Technical Sales, Inc., 205 W. Market St.
SEATTLE 7, WASHINGTON—Alaska-Pacific Supply Co., 2412 Market St.
VANCOUVER, B.C.—Lipsett Engine & Mfg. Co., 1315 Powell St.

dentally, just as the acetylene light was discovered accidentally by a man throwing calcium carbide into a pool of water and seeing it ignite, so was Captain Halfhill's discovery of Albacore for canning accidental.

"This fish which had been caught for some time and sold locally in the fresh state, but had never been canned. When caught they were cleaned and hung up on the pier. Captain Halfhill noted that there was some drainage of blood and that the meat of the fish turned almost pure white. This gave him his idea as he thought it would make a very attractive package. He was at this time working in a sardine cannery owned by a man named Robert D. Wade, who wanted to try the packing of this Albacore in cans, but was wise enough to know that he had to have some one who could introduce it. This concern was the Southern California Fish Co. of San Pedro.

First Pack 2,000 - 2,500 Cases

"If my recollection serves me right, the total quantity put up that year was between 2000 and 2500 cases. I told him we would take it all and then the fun started. We brought it on to New York. Nobody had ever heard of it and after we told them about it, a few customers agreed to put it out, but we had to guarantee the sale of it. This as it turned out, caused us to take back every tin that we shipped out as it could not be sold. I still liked the product and had faith in it and although I was extremely busy in those days, I went so far as to give it away to old customers out of New York in order to force the sale of it on the public, regardless of price, in order to get it introduced. For a time, we gave a case away free with a bag of Coffee. We sold a lot of Coffee, but we got a lot of White Meat Tuna Fish back.

The Perils of the Pioneer

"The following year, Mr. Wade still undaunted, went into it again as did a man named Lefrantz and also a Dr. Hogan. Considering the tremendous success we had with it the first year, one could readily imagine what happened the second year with three people in it, none of whom had a market for the goods.

"I remember, on my trip that year to California. I visited my friend, Carl Triests of Haas Baruch of Los Angeles, to whom I showed this product and when I told him about selling Albacore commercially in cans, he thought I was crazy. Later I induced the buyer of Austin, Nichols & Co. to put in 150 Cases of these goods. Several months later I had a visit from Harry Balfe, Sr., who in a tirade punctuated with epithets Rabelaisian as well as Balfian, wanted to know what kind of a trick I had played on his buyer, because they still had the 150 Cases intact. They could not sell one case . . . we took the goods off their hands.

Tide Turned in Third Year

"From the above, one can realize that nobody thought I had struck a Bonanza in the canned goods line. The third year, when I again went to California, I was about fed up and through with the canning of Albacore. Mr. Wade was still earnest and still sanguine and told me plainly that I had to go on with him or otherwise, the cannery would have to shut up. Why, for any reason, this should have been my trouble, is yet unanswered, except for the fact that I had always in a measure done what I could to aid those in the canning industry for the good of the industry; so I agreed to go along for another year. Seeman Brothers at that time, was not a Corporation and I believe, that what tolerance my partners showed toward me in respect to this product, at that time, was given in the same way as a parent would let a young son go fishing as a reward for other deeds well done.

The late Wiley Ambrose, who succeeded his father-in-law, Robert D. Wade, and who was in turn succeeded by W. Wade Ambrose, today president of the Westgate-Sun Harbor Co.

Lightmeat Tunas Lagged Behind

"There is very little more about the early start, except that in this third year, the corner of success seemed to be turned. A few people commenced to ask for the goods and the following year, several went into the game. Mr. Wade died and his son-in-law continued the business. This was Wiley Ambrose, now head of the Westgate Sea Products Co. at San Diego.

"It was some time after, before it was possible to sell any of the other varieties of Tuna Fish now so well known on the market, as the White Meat of the Albacore was the only thing in demand by the American trade. From experience in the last three years, it looks as though our early efforts might eventually come to naught. The Albacore fish is very shy, and the popularity that has been secured for it, has evidently made it so bashful that it seems to have disappeared and gone to other waters."

Editor's Note—W. Wade Ambrose succeeded his father, the late Wiley Ambrose, as president of the Westgate Company. It was for his grandfather, Robert D. Wade, that the present Mr. Ambrose was named.

Highest Quality Required in Frozen Salmon Used for Subsequent Canning

Higher quality is required in frozen salmon which is to be used for canning than the minimum required for merchantability of the fish as frozen salmon.

This statement was made by Maurice E. Stansby, chemist-in-charge of the U.S. Fish and Wildlife Service Technological Laboratory, before the 14th Annual Salmon Cutting at Seattle in March.

In other words, he elaborated, salmon which is quite acceptable if marketed frozen may not produce a quality product if thawed and then canned.

This is due to the acceleration of certain chemical changes in the fish as result of the temperatures employed in canning. For example, the processing temperature clearly increases fading tendency of frozen fish. It also accelerates the oxidation of oils, with resultant rancidity. The several species vary in susceptibility—with Pinks the most difficult to use for canning after being frozen.

Mr. Stansby generalized that the process of canning produces changes in the fish such as might be expected to be brought about by three to four months additional holding in cold storage.

Some of the trouble which has been experienced with salmon frozen for canning has been traced to spoilage which has occurred *during the process of freezing.* Mr. Stansby ascribed this condition generally to overloading brine wells; inadequate brine circulation, usually as result of overcrowding; and insufficient refrigeration capacity for the demands put upon it. He said that the freezing process under such conditions might take as long as 48 hours, where a quarter of this time would suffice for the same type of fish properly handled.

While deterioration of frozen fish in storage can be greatly retarded by adequate ice glaze regularly renewed, freezing tends to produce three conditions for which no correction has yet been found. These are:

1. Tendency of the canned-from-frozen fish to develop "curd" composed of precipitated proteins. Amount of curd increases with the time the fish has been held in storage; and long frozen storage produces darker color in the curd.

2. Amount of free oil showing in the can is less where the fish has been frozen. While this does not affect the intrinsic value of the fish in the can, it reduces one of the criteria by which salmon is often judged.

3. Freezing alters the texture of the salmon, with a tendency to dryness. This deterioration is also proportionate to the time and temperature of storage.

Mr. Stansby's conclusion was that *"the best packs are made from unfrozen fish;"* but that *acceptable goods can be produced from salmon which has been held frozen for a short period at very low temperature, and with adequate glaze.*

He was asked if the laboratory's work had indicated the relative value of brine freezing and sharp freezing as a process preliminary to canning; replying that this determination had not yet been made.

Seaboard Renews Its California Operations

Ralph Marsh of the Seaboard Fishing Co., who in 1950 was credited with opening-up the profitable Moss Landing salmon trolling and mild cure market for northern fishermen, this year again is operating at Moss Landing—and also at Sausalito, on San Francisco Bay.

Buying operations are being conducted through the Mason Case Company, which has had a store at Moss Landing for years, and is opening another at Sausalito at the dock of the Sausalito Shipbuilding Co.

Mr. Marsh plans to purchase not only troll salmon but also Albacore, when that fishery starts.

"Atka" Tries New Twist With Auxiliary Mounting

An interesting installation of a Petters 1-cyl, 5-hp. diesel to operate the refrigeration system was made on the San Diego Albacore boat, *Atka,* Skipper Robert Ruiz. Shepherd Diesel Marine distributors for ABOE, Inc., Petter Engine Division, made the installation.

The auxiliary was mounted on the after deck, then a steel frame was built and a small refrigeration compressor placed above the diesel. Protection is secured from a plywood housing, which is easily removable. By this system, which may be used on a number of Albacore boats before the new season opens, space is conserved below deck for carrying additional fish; while the machinery is accessible for servicing.

Sivertsen Sells Interest In Reliance Shrimp Co.

John Sivertsen of Wrangell has sold his interest in the Reliance Shrimp Co., to A. V. Ritchie and V. A. Anderson. Neil Grant of Wrangell is retaining his interest in the company.

Sivertsen has been with the Reliance Shrimp Co. for the last four years after buying out George Sumption. Verne Anderson is managing the cannery since the opening of the shrimp season May 1.

Cal-Tuna Steps-up Its Canning Capacity

California Tuna Canning Company, San Diego has stepped up production to 200 tons daily by the installation of considerable new equipment and machinery, according to Earl M. Nielsen, president.

Providing more steam a new 300-hp. boiler has been completed. Also built is a new warehouse. Inside the cannery four Carruthers fancy tuna packers; three Standard Iron Works chunk-packing machines are installed. Three new 127′ packing lines are in, built of stainless steel, and nine Pacific Can Company high-speed, straight line feed can-closing machines.

G. Bruce Newby, Long Beach naval architect, whose latest clippers, *Gulf Star* and *Challenger,* have been delivered by Avondale Marine Ways, New Orleans, was on an extended trip last month. As Washington, D.C., was one of his stops, the veteran architect might have been on official business. During World War II, he was director of small boat building on the Pacific Coast.

Jack Gilbert Dies After Striking Career

John N. Gilbert, whom the Alaska salmon industry knew as "Jack," died suddenly at his home in Seattle May 25, closing a striking career in the northern fisheries.

Only 56, he had served as an operating executive in all districts of Alaska, from Kotsebue Sound to Dixon Entrance. He had been identified with several of the largest organizations in the business, having served as vice president of Alaska Consolidated Canneries, Alaska Pacific Salmon Co. and Pacific American Fisheries.

After World War II he served for a time as fisheries consultant for UNRRA in China; later returning to Seattle and engaging in business not directly connected with the fisheries. At the time of his death he was president of Belt Ice Distributors, Inc., specializing in the sale of continuous ice-making machinery to the fishing industry.

A widow and daughter survive him. Mr. Gilbert was born in Minnesota and had made his home in Seattle for 45 years. He is survived also by a brother, William Gilbert, who retired from Alaska clam and salmon canning a few years ago when he disposed of his Cordova cannery properties to Whiz Fish Products Co.

"Swiftwater" is Lost On Costa Rican Reef

The tuna fishing vessel *Swiftwater,* owned by the Columbia River Packers Association, was lost late in May on a reef in Bolinas Bay, Costa Rica.

Report of the accident was wired to Astoria by Capt. John Marincovich, who said the vessel was being taken into harbor to escape a storm when she struck. The crew of 11 attempted to escape in the power skiff, but this was crushed against the *Swiftwater.* All hands finally escaped by means of a breeches buoy, but the men lost everything.

The vessel, which was a 76-footer built in 1945, was reported a total loss.

Kelez Joins Navy

George Kelez, for a number of years in charge of the U. S. Fish and Wildlife Service fish biological investigations in Alaska, in May was called to active duty in the Navy and assigned to Kodiak. His rank is that of lieutenant-commander.

Commander Kelez during World War II served in the Navy, being stationed in the Aleutian theater.

One hears a lot these days about modern gillnet fishing boats, and how the type is developing. Pacific gillnetters had their beginning on the Columbia River long ago, and still trace some of their characteristics to the early Columbia River craft; but gillnetters on the Columbia are as modern as any. *Carol H.,* built by the Columbia River Packers Association at Ellsworth, Wash., for Ray Hendricks of Warrendale, Ore., shows what a modern Columbia River gillnetter looks like—and how she runs. She is 29' 4" in length and is powered with a 160-hp. Chrysler "Majestic" engine, 2.04 to 1 reduction.

Only One Big Change in B. C. Salmon Cannery Line-up for '51

British Columbia's salmon canning industry is operating its plant this year pretty much as in 1950, with few changes of importance except the transfer of Canadian Fishing Co.'s cannery from Carlisle to Prince Rupert.

The move of Canfisco's northern operation was dictated by the policy of integration and centralization that has become an established trend among the larger companies engaged in the industry. The company has taken over a location from Canadian National Railways at the Prince Rupert waterfront under long-term lease.

Office administration will be maintained at Atlin Fisheries, which is the headquarters of Canadian Fishing Co. at Prince Rupert. C. E. Salter, who was manager of the Carlisle plant, continues as cannery manager at Prince Rupert with John I. Fraser, who formerly was in charge of the Porcher Island operation.

Canadian Fishing Co. will operate its Home, Butedale and Goose Bay canneries on salmon as it did last year.

No important departures from operating policy are planned this year by B. C. Packers, which will have its salmon canning concentrated at its three big plants, Imperial, Sunnyside and Namu.

J. H. Todd & Sons will have three canneries packing salmon this season — Empire, in Esquimalt, managed by Walter Rasmussen; Inverness, and Klemtu, both being managed by Charles McKinnel.

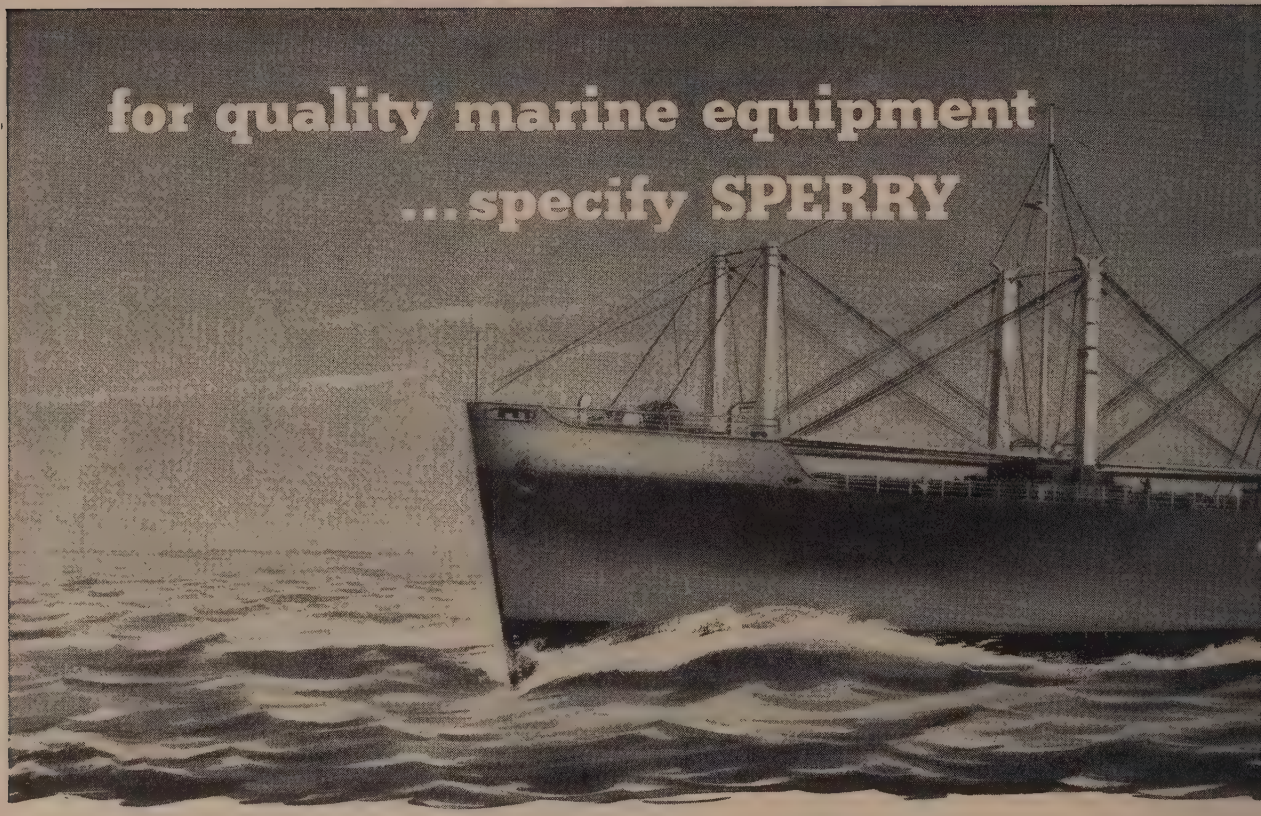
Nelson Bros. Fisheries will have St. Mungo and Port Edward canneries running during the early part of the salmon season and may open up Ceepeecee on the west coast of Vancouver Island subsequently, depending on conditions.

Anglo-B.C. Packing Co. contemplates no change in its schedule of operation at Phoenix, where G. A. MacKenzie is manager, and North Pacific, in charge of O. W. Philipps.

Other companies that plan to operate on approximately the same basis as in 1950 are: Colonial Packers, Great West Packing Co., Johnston Fishing & Packing Co., Francis Millerd & Co., National Fisheries, Queen Charlotte Fisheries, Tulloch Fisheries, Cassiar Packing Co.

Westminster Canners at New Westminster may be a factor in the salmon canning activity on the Fraser this season, but a definite decision has yet to be reached.

for quality marine equipment ...specify SPERRY



For true courses, for accurate positioning, for sharp radar presentations . . . the three most important requirements essential to precise navigation . . . specify Sperry instruments to assure reliability and dependability of performance.

Sperry navigational instruments complement each other . . . all reflect the company's 40 years of experience in the marine field . . . all are serviced by the same competent Sperry field engineers located in major ports the world over.

In minimizing navigational hazards and delays . . . night and day, in all weather and conditions of visibility . . . time and fuel are saved, resulting in operating economy. On seas, lakes and rivers, vessels of all types are getting top-quality performance from the top-quality instruments designed and manufactured by Sperry.

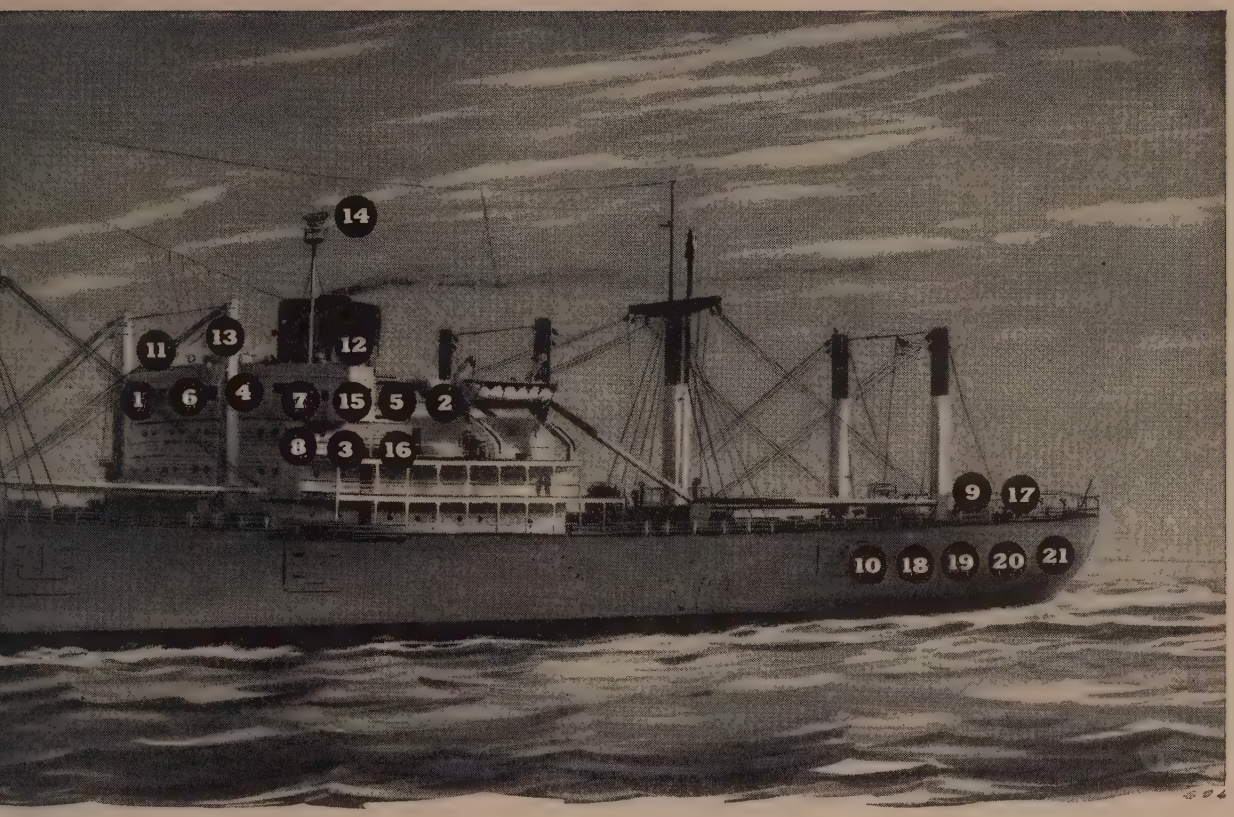
1 Radar Indicator. On its 12-inch viewing scope, radar operator gets sharp presentations on range scales from 70 yards to 30 miles . . . a choice of either true or relative bearings. Sperry Radar meets the most exacting requirements as an aid in piloting, as a position indicator and as an anti-collision device.

2 Loran Indicator. Direct-reading time-difference indicator makes operation of loran simple and quick, and prevents errors. With Sperry Loran the navigator can get his position in a few minutes at any time, day or night, in any weather. Automatic frequency control aids in positioning signals and prevents their drifting.

3 Master Gyro-Compass Components. Sperry Gyro-Compass provides accurate, true-North indications essential to the economical navigation of a ship. Besides giving true courses, the Gyro-Compass, by means of accessories, provides data for operating automatic steering equipment, recording the vessel's heading and presenting true-heading information for radar and bearing repeaters.

SPERRY GYROSCOPE COMPANY
DIVISION OF THE SPERRY CORPORATION

Great Neck, New York • Cleveland • New Orleans • Brooklyn • Los Angeles • San Francisco • Seattle
In Canada—Sperry Gyroscope Company of Canada, Ltd., International Aviation Building, Montreal



4 Gyro-Pilot Stand with Steering Repeater. With automatic straight-line steering, the Sperry Gyro-Pilot or "Metal Mike" contributes directly to economical ship operation. Steering straight courses with the aid of the Gyro-Compass, this equipment uses only a small amount of rudder, thereby minimizing wear on the steering gear.

5 Course Recorder. Operating on a repeater circuit from the Master Gyro-Compass, the Sperry Course Recorder makes a graphic record on a time chart of all angular movements in azimuth of the ship's heading. This equipment is often used as evidence in maritime court cases.

6 Rudder Angle Indicator. This self-synchronous indicator provides a continuous, instantaneous indication of the ship's rudder position.

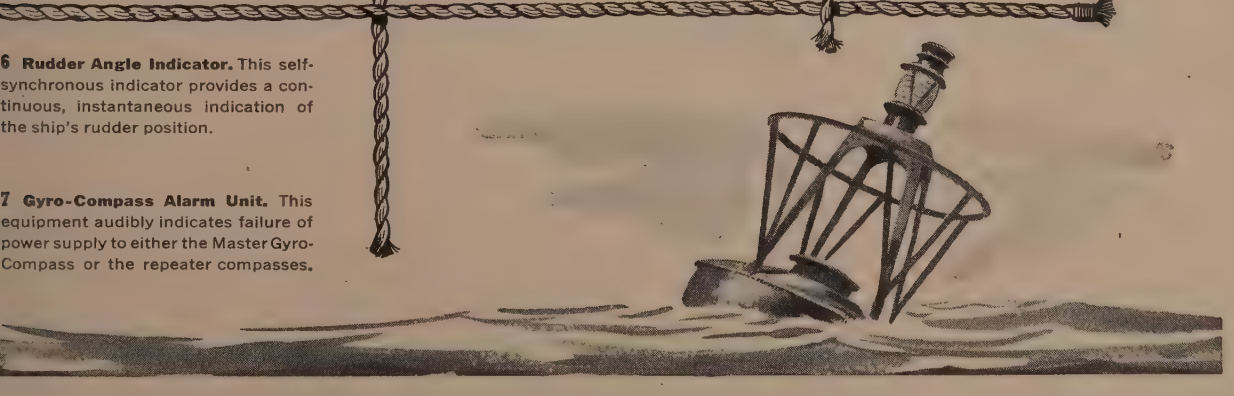
7 Gyro-Compass Alarm Unit. This equipment audibly indicates failure of power supply to either the Master Gyro-Compass or the repeater compasses.

8, 9, 10 Repeater Compasses. As many repeaters as desired can be operated from the Gyro-Compass and its components. These repeaters are designed to improve the facility and accuracy of navigation by providing the helmsman with conveniently located and efficient references for steering.

11, 12, 13 Bearing Repeaters. Operating from the Master Gyro-Compass, bearing repeaters are conveniently located for the navigator to take bearings or sun azimuths.

14 Radar Scanner.
15 Radar Transceiver.
16 Radar and Loran Motor Generator.
17 Rudder Angle Indicator.
18 Rudder Angle Transmitter.
19 Gyro-Pilot Power Unit.
20 Gyro-Pilot Control Panel.
21 Rudder Angle Indicator and Gyro-Pilot Dynamotor.

Sperry marine instruments not shown above include electrical, mechanical and hydraulic steering systems, and an automatic steering system for smaller craft.



Typical of the Mexican shrimp trawler fleet of Mazatlan is the "Moimar," built by Tomas de Rueda, Jr., and fishing for Moimar, S.A. This is a 50-footer, recently repowered with a 671 General Motors engine, 4:1 Twin Disc reduction. With her new power plant she can make 8 or 9 "knots." "Moimar" fishes with one of the largest trawls in Mazatlan. Mr. Rueda builds boats ranging from 45 to 60 feet in length and since January 1, 1951, has launched four. Many of his craft are powered with "Caterpillar," Atlas or General Motors engines.

Mexico's Pacific Shrimp Industry Ends Record Season

The Mexican Pacific shrimp fishery season was practically at an end by July 1, with most of the freezers in the northern coast of the Gulf of California closed. Most of the operations during the final part of the season centered in the Mazatlan area.

Reports reached Southern California in early June of discovery of a new shrimp bank with tremendous concentration. Located about midway from Topolobampo to Mazatlan, at Atata, Sinaloa, the shrimp, in larger counts, from 26 to 65, were discovered over a 30 mile coastal area, and at around 32 fathoms.

While some shrimp were being taken there, the discovery came too late to increase gross tonnage materially, the trawlers needing larger winches and heavier gear to work at this depth. Some experimental work has been carried on, mostly by Mar Bermejo, Santa Rosalia, Lower California, but across the Gulf. The shrimp were reported to be of reddish-brown color, changing to white after cooking and of excellent taste.

As the season waned and production diminished, wholesale quotations raised for the Under 15 and 16-20 counts 3¢ per lb. to 68¢. Demand was strong, particularly from the east, where Mexican Pacific shrimp, premium brands, layer pack, was commanding 3¢ to 5¢ per lb. over offerings from elsewhere.

To June 1, from August, 1950, this season had produced in round figures, 23,300,000 lbs., of which 22,400,000 lbs. was frozen, layer pack; the balance, 880,000 lbs. was exported to this country, fresh in ice. Last year, to June 1, the Mexican industry had produced 19,000,000 lbs.

5-Month Mackerel Pack 313,000 Cases

Mackerel fishing out of Los Angeles-Long Beach harbors in May produced 4,220 tons, and 72,942 cases. Fourteen plants operated with mackerel. The industry was about even with the same period in 1950 to June 1, of, in round figures, 313,000 cases. Pacific mackerel remained a scarce product.

Quotations on Pacific were from $6.25 to $6.50; Jack was a steady, $5.00. Packers were finding an increasing market, export for mackerel ovals in tomato sauce.

Union Officials Given Jail Terms, Suspended

Three fishermen's locals of the I.L.W.U. were fined a total of $4,500 for violation of the Sherman anti-trust laws in the San Francisco court of Federal Judge P. Murphy.

In addition seven officers of six locals were given one-year suspended sentences and put on "good behavior" by Judge Murphy.

San Francisco Local 34 of the I.L.W.U.'s Fishermen's & Allied Workers division was fined $3,000; Local 35 of Pittsburg, $500; and Local 40 of Fort Bragg, $1000.

Receiving suspended sentences were Jeff Kibre, former secretary-treasurer of the joint council and now secretary of its successor, the fishermen's division of the I.L.W.U.; John L. Pastorino, Local 34; Rosalie Norton, Local 35, Pittsburg; Reed Ross Hass, Local 38, Eureka; Myron G. Lind, Local 39, Crescent City; Ray E. Welch, Local 40, Fort Bragg; and Bert K. Bean, Local 52, Bodega Bay.

The officials and locals were indicted July 28, 1950 on charges of conspiring to fix northern California fish prices.

They had pleaded innocent earlier, but later changed their pleas to nolo contendere, which meant they would not contest the government charge.

Judge Murphy gave the locals eight months to pay their fines after Defense Attorney George R. Anderson said Locals 34 and 40 were in poor financial condition.

Three other locals, 38 Eureka, 39 Crescent City and 52 Bodega Bay, indicted at the same time pleaded not guilty and produced witnesses who testified the organizations no longer existed.

Export Squid Canning Spurts at T. I.

Packing of squid in 1-lb. talls for the export market was an unexpected activity for Pan-Pacific Fisheries, Inc., Terminal Island, last month, and the firm processed thousands of cases, packed under the "Fairplay" label of Parrott & Company.

The fish appeared off San Clemente Island, Southern California, in a tremendous concentration. Fishermen reported the find and the cannery decided to make a pack. One seiner made a 100-ton haul.

This was the *S. G. Giuseppe,* and the squid were so thick in the water, no set was made with the net and the fish were brailed in from the side of the vessel.

Another NORDBERG FIRST

the Supair Thermal Engine

THE MOST OUTSTANDING DEVELOPMENT IN MODERN DIESEL DESIGN

The *SUPAIRTHERMAL* Engine, the outstanding engine of the Diesel field, is available in a complete range of 4-cycle types for fuel oil, Duafuel, or spark ignition gas operation . . . for all applications, in sizes from 425 to 3200 B.H.P.

Write for further information on the *SUPAIRTHERMAL* Engine . . . the most outstanding development in a long line of famous Nordberg "FIRSTS".

NORDBERG MFG. CO.
Milwaukee 7, Wis.

featuring:

- ★ ONE-THIRD MORE HORSEPOWER THAN CONVENTIONAL TURBO-CHARGED ENGINES
- ★ MORE HORSEPOWER IN LESS SPACE
- ★ MORE HORSEPOWER PER GALLON OF FUEL
- ★ MORE HORSEPOWER HOURS PER GALLON OF LUBE OIL
- ★ INCREASED THERMAL EFFICIENCY
- ★ LESS HEAT LOSS TO WATER JACKETS
- ★ LESS WEIGHT PER HORSEPOWER
- ★ LOWER INSTALLATION COST
- ★ LOWER OPERATING COST
- ★ LOWER MAINTENANCE COST

BUSCH-SULZER
A DIVISION OF NORDBERG

NORDBERG
DIESEL ENGINES

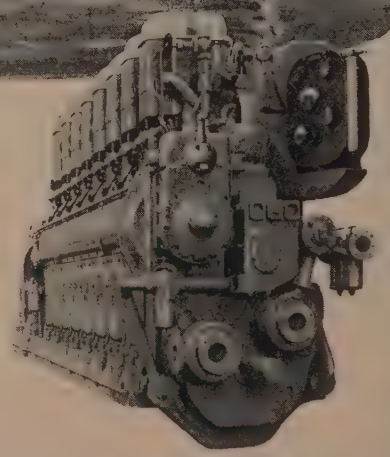
NORDBERG MACHINERY

37,000 hours

— Not one hour lost through engine failure!

Since 1946, rugged and dependable Enterprise Diesels have carried these two top tuna clippers through 37,000 hours on the job—logging an equivalent of more than 16 times around the world—*without a single hour lost as a result of engine breakdown.* Periodic engine servicing has required a minimum of down-time for repairs, and few replacement parts.

Enterprise Diesels are constantly turning in similar records of performance and efficiency on all types and sizes of workboats, commercial and fishing craft. For long-run economy, specify Enterprise—the choice of marine power experts. Full information on request.



Main propulsion for the "Chicken of the Sea" is an Enterprise turbocharged Model DMQ-38, rated 1500 HP at 300 RPM, with two Enterprise 200 KVA auxiliary generator sets.

The "White Star" is powered by an Enterprise turbocharged Model DMQ-36, rated 1200 HP at 300 RPM.

ENTERPRISE ENGINE & MACHINERY CO.
A Subsidiary of General Metals Corporation
18th & Florida Streets, San Francisco 10, California
Offices in Principal Cities

Enterprise MARINE Diesels

PALADINI'S PACKAGING

A. Paladini Inc., is one of the oldest names in the fresh fish producing industry of the West. With headquarters in San Francisco, and branches along the California coast, the company is one of the dominant factors in California's fresh and frozen fish industry.

The management of the company, Alex Paladini, president; and Lionel Shatz, secretary-treasurer, have long been merchandising minded, and have watched with interest the development of the 1-lb. frozen consumer type of packaged fillet. Laying its plans carefully, and watching for the right time, A. Paladini Inc., late last year introduced a 1-lb. consumer package of filleted frozen fish. Varieties packed include all types of sole fillet, ocean perch, cod, salmon and rock-fish fillets.

Under the direction of Louis Cavallini, long-time Paladini manager in Northern California, a modern packing plant was installed at the company's receiving station on the Noyo River front, just south of Fort Bragg.

The plant is U-shaped, and straight-line production methods prevail. The whole fish are landed at one end, and come out the other, packed in 1-lb. cartons, 12 to the shipping case.

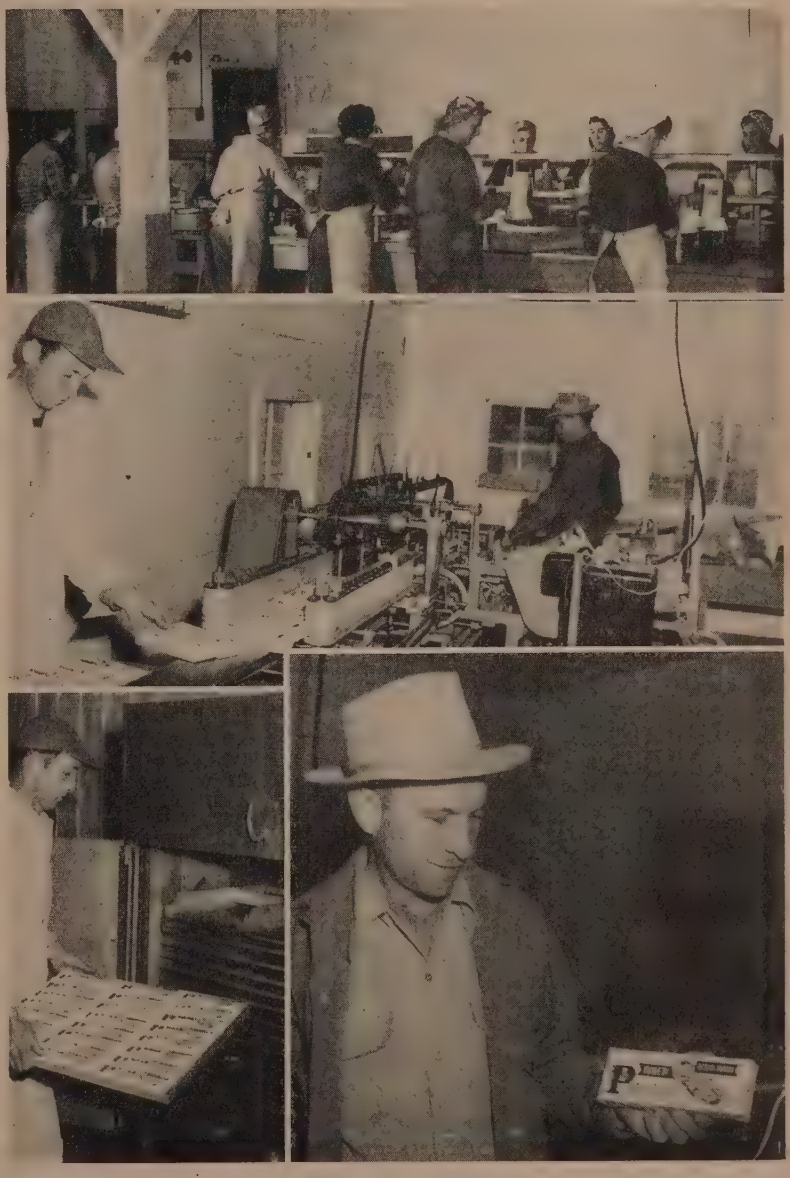
After the fish are washed, they are filleted and put in stainless steel pans and weighed. The fillets are then brought to a grading screen, sorted, and cut to size to conform with the 1-lb. package.

The fillets are then packed at a modern, stainless steel packing table, accommodating 20 packers, into Marathon 1-lb. consumer type cartons, which are conveyed to a Type FA Package Machinery packaging machine, purchased through Fred Todt Co., which wraps the cartons in handsomely decorated cellophane wrappers.

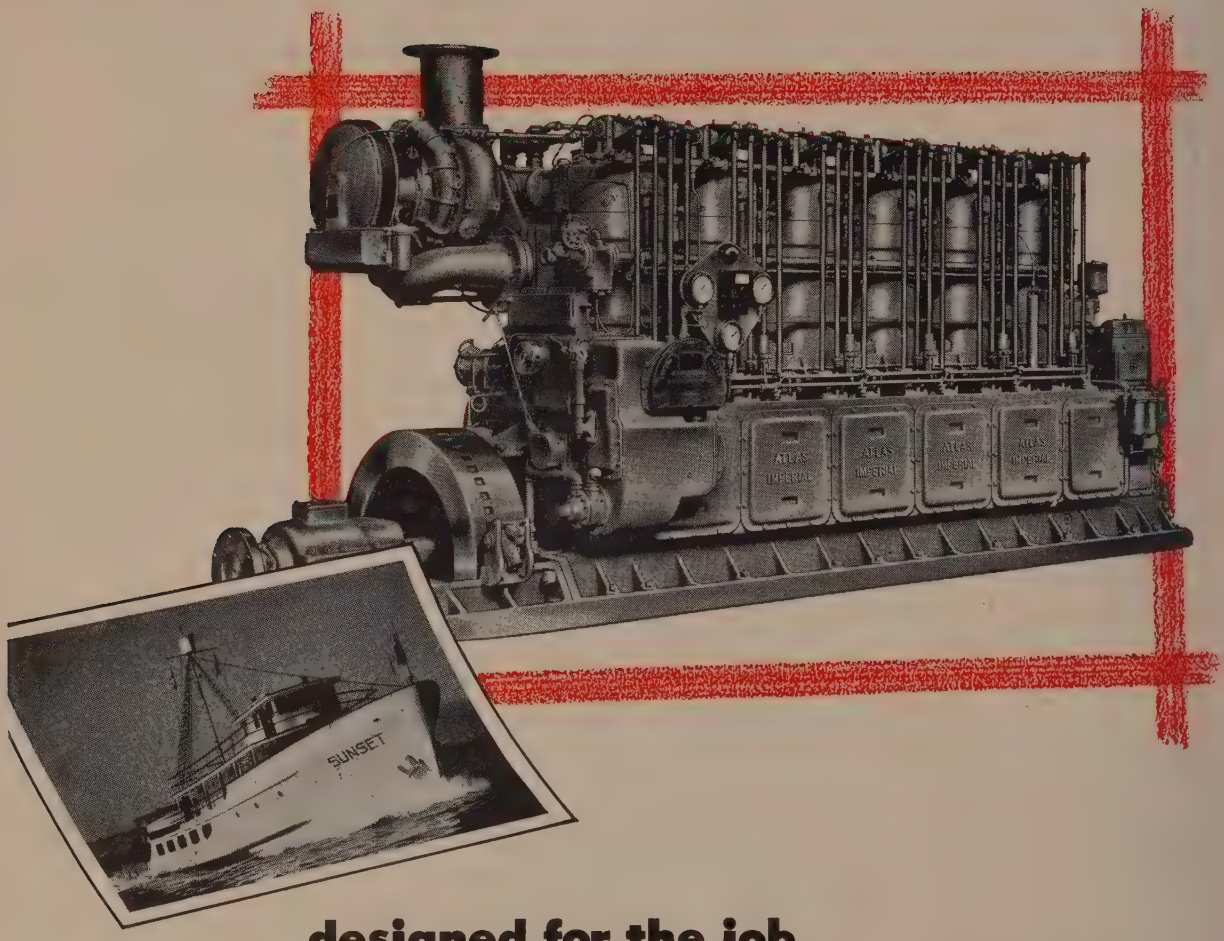
After the fillets are packed they are put on metal trays that hold 24 cartons to the tray, and are put into a portable freon plate freezer.

The portable freezer was developed to Mr. Cavallini's ideas. He wanted a freezer that would not take up too much room, that would be easy to maintain, and that could be put in any spot in the plant.

The freezer is 6′ high, 6′ long, and 5′ deep, and holds 30 trays of cartons, or 720-lbs. of fish. It is loaded and unloaded by hand. Hydraulic cylin-



In the panel, from top to bottom, are photos of the Paladini fillet-packing operation at Fort Bragg, Calif. The stainless steel packing table is shown in operation; then wrapped fillet packages emerging from the Package Machinery Co. wrapper; a tray of fillets being placed in the plate freezer; and finally Louis Cavallini, manager, with the finished product.



designed for the job..

..and you can depend on it

When you lower a Superior or an Atlas engine into your boat, you're powering-up with a sea-going engine. It's designed for the job . . . isn't a land-lubber engine that's been jury-rigged for marine service.

Both Superior and Atlas engines are the time-tested, sea-proved 4-cycle design . . . long on service, economy, dependability . . . short on trouble and tinkering. Both engines are backed by a combined 100 years of engine-building experience. And they're backed by our continent-wide service and parts organization.

You can get the Superior or Atlas engine you want in the horsepower you need. Write for bulletins and the address of the Superior-Atlas branch near you.

THE NATIONAL SUPPLY COMPANY

ENGINE DIVISION **SPRINGFIELD, OHIO**

Superior ENGINES

ATLAS Imperial DIESEL ENGINES

NATIONAL OIL FIELD MACHINERY AND EQUIPMENT
...SPANG PIPE...SUPERIOR & ATLAS ENGINES

ders bring plates to bear equally on all cartons at a pressure of 150-lbs. per sq. in. Freezing time averages an hour and 15 minutes. The motor and compressor of the plate freezer are separate units of the machine.

A. Paladini Inc. has two of these freezers in Fort Bragg, and while one is freezing the other is being filled, thus giving continuous operation. They have a daily capacity of about 8,000-lbs. of fish.

Finally the cartons of frozen fillets are packed into Fibreboard shipping cases, 12 cartons to a case.

The fillets are marketed under "Paladini" brand.

Herb Nelson, Founder Of Crab Firm, Dies

Herbert E. Nelson, 66, founder of the Nelson Crab and Oyster company at Tokeland, was stricken by illness at his home May 28 and died enroute to an Aberdeen hospital.

Born at Oysterville, Wash., Mr. Nelson came to Tokeland in 1929 with $75 in his pocket and proceeded to build a fishing and canning fortune in Tokeland before retiring to his 2,000-acre ranch where with one of his sons he raised purebred cattle. Since he acquired his ranch in 1942 the fishing and canning business developed by Nelson has been operated by two of his sons.

Surviving are his wife, Ina; sons, Melvin, Ernest, Chris and Raymond, all of Tokeland; three daughters, and five brothers, Anton, Ferdinand, Arthur, Tom and Charles Nelson, all residing on the peninsula in the Long Beach, Wash., district.

International Fishways Research Proposed

Formation of an international research organization to work on the development of fishways to operate in conjunction with waterpower enterprises in Washington, Oregon and British Columbia has been suggested by the Salmon Canners Operating Committee of B.C.

The problem of fish-and-power is not insoluble, the committee contends. With sufficient time, money, talent, interest, money and direction, it could be solved. It is basically one of getting fish safely past high dams, both ways, and the solution is not beyond man's skill and ingenuity. The problem, the committee maintains, has not been solved because it has never received the necessary concentration of scientific and engineering skill.

Canned Crab Season Variable by Areas

Commercial crab fishing in Oregon and Washington was about over for the season by the middle of June with reports on results varying widely with the locality.

On the Columbia River packers generally reported production equal to or better than the year before. South of the Columbia the catch was very much better than in the poor season of 1950.

North from the Columbia, and particularly at Grays Harbor, the disaster of 1950 was repeated with added emphasis in 1951. The season was the worst ever.

Much of the crab which was canned and frozen on the Columbia came there from points south down the Oregon coast by highway truck. Local deliveries on the River were definitely light.

Twelve cents was the ruling crab price on the Columbia during the major part of the season, although it reached a top of 14¢. At Grays Harbor as high as 17¢ per lb. was paid for crabs during the worst of the scarcity.

L. A. Minard Dies

Lloyd A. Minard, 65, a widely known salmon industry accountant, who had served various Alaska companies for more than 25 years, died in Seattle early in June. He was a native of Astoria, where he entered the salmon business in the employ of the Sanborn-Cutting Co., moving to Seattle in 1925.

Arthur DeFever Moves

Arthur DeFever, naval architect and marine surveyor, in June announced a new office location at 701 East Harbor Drive, Post Office Box 1049, San Diego, 12, Calif. The office telephone is Franklin 9-2159.

Three Astoria Plants Can Imported Albacore

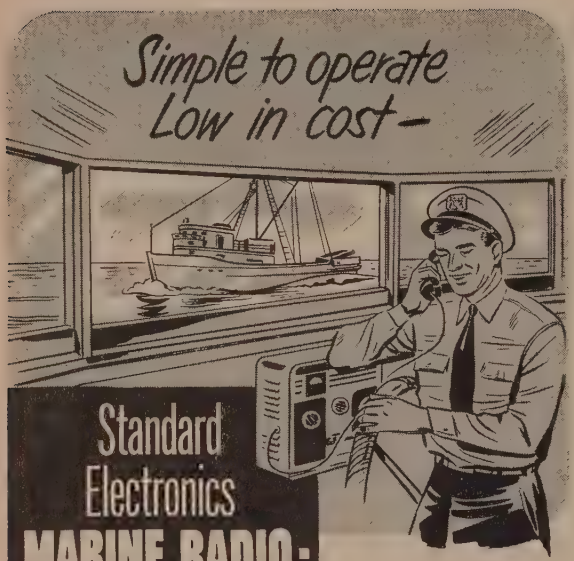
Early in June three Astoria tuna canneries were running on Japanese frozen Albacore, keeping their packing crews busy, and keeping well-drilled working forces ready for the appearance of local Albacore.

Columbia River Packers Association, Inc., Barbey Packing Corporation and Union Fishermen's Cooperative Packing Co. all were reported running on frozen Albacore from Japan. The first-named has used imported fish for some time to supplement the supply of domestic tuna; but the latter two this summer are canning imported goods for the first time, and on something of a trial basis.

Van Camp Sea Food Co., which handled a good deal of Central American tuna at its Astoria plant during the winter and early spring, had had none of this fish for a couple of months, and was preparing its plant for the local North Pacific Albacore season.

New Chandlery House Opens at Ensenada

Proveedora Industrial de Ensenada, S.A., is the new name of the ship chandlery section of Cia. Maritima Industrial de Mercantile, S. de R.L., Ensenada, Lower California. New manager is Juan Rodriguez, eldest son of Abelardo I. Rodriguez, former president of Mexico. Roberto Ruiz is assistant manager. Overall general manager of the fishery enterprises controlled in Lower California by General Rodriguez is Francisco A. Morales, Jr. Marine Products Company is world distributor for canned abalone and other products of the peninsula's west coast.



Standard Electronics MARINE RADIO-TELEPHONES

ECONOMICAL TWO-WAY COMMUNICATION

Dependable Standard Electronics ship-to-ship, ship-to-shore radiotelephone communication increases efficiency, cuts operating costs. Coastguard contact is provided at all times for increased safety, storm warning, etc. Four diversified types of equipment meet the requirements of practically any boat, large or small . . . provide ample communication facilities. Special features include simplified controls, low power drain, compact design and finger-tip channel selection. A flick of the finger selects the desired channel and automatically locks both transmitter and receiver to that channel under positive crystal control. Get the time and money saving facts today! See your Standard Electronics marine radiotelephone dealer or call the nearest Graybar Electric Company office.

MODEL MT271, illustrated, engineered for heavy duty service and ease of operation. Compact, efficient and reliable; 80 watts output, 6 channels.

Distributed by GraybaR

Need an up-to-date MARINE RADIO LOG BOOK?

Order from your Standard Electronics Marine Radiotelephone Dealer or use coupon below to take advantage of this special offer, or get free literature.

Standard Electronics Corporation

A Subsidiary of Claude Neon, Inc.

25 WEST 43rd STREET • NEW YORK 18, NEW YORK

☐ Send ..... copies of new LOG BOOK at only 50c each. Check or money order enclosed. (Offer good only in U.S.A.)
☐ Send free descriptive literature at once. A-7

Check 1: ☐ boat owner ☐ dealer ☐ commercial operator ☐ other

NAME.....

STREET.....

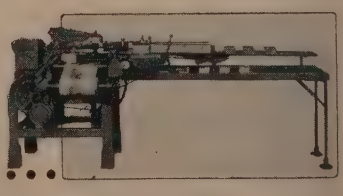
CITY.....STATE.....

You can be sure of good package appearance when you wrap on Hayssen Automatic Wrapping Machines . . . and the unit-cost of wrapping will be low. Because Hayssen machines are mechanically simple, rigid, and have few moving parts, the maintenance cost is lower and machines have a longer life. Ask for free descriptive literature—no obligation.

HAYSSEN MFG. COMPANY • SHEBOYGAN, WIS.

Hayssen
ELECTRIC EYE WRAPPING MACHINES

WRITE TODAY



Columbia May Chinook Quality Superlative

Substantial increase in the Columbia River's spring salmon pack was reported by the canners generally when fishing closed May 26 for a period of a month.

The latter part of the season saw fishing interfered with by the annual freshet, with its gillnet-handicapping drift and muddy water.

Operations during the four-weeks spring season were reasonably satisfactory, however, and the yield definitely ahead of production in the first phase of the 1950 season.

At the end of the season a few boats were still getting as much as 300 lbs. of salmon a day—although many were reporting less than 50, which means some boats were "skunked."

Quality of the fish was excellent —typical of the best type of May Chinooks. Individually the fish were small, with none of the "hogs" which sometimes are found in the May Chinooks on the River. The Salmon were high in color and extremely fat, producing a pack of the highest quality.

Later Crab Season

There's a new crab season in ocean waters off Mendocino, Humboldt and Del Norte counties, in California.

Gov. Warren has signed the bill shifting the present season Nov. 15 opening to Dec. 15. The division of fish and game said crabs along the north coast were soft and not in good marketable condition prior to Dec. 15.

Fred Cleaver Joins Oregon Fish Staff

Fred Cleaver, for some time senior biologist on the staff of the Pacific Oceanic Fishery Investigations, with headquarters in Honolulu, resigned recently to accept a position on the scientific staff of the Oregon Fish Commission. For a number of years he served the Washington Department of Fisheries as a biologist, and is recognized as a leading figure in fisheries science.

He is being succeeded with P.O. F.I. by Dr. William F. Royce, who has been with the Fish and Wildlife Service's North Atlantic Fisheries Investigations since 1942.

Peter Torrente, son of *Mariano Torrente*, owner of the Monterey purse seiner *New Vagabond*, and a former crew member on his father's boat, has enlisted in the Coast Guard.

Furious Fishing Pace Cuts Halibut Season to 56 Days

Ten days were cut from the Pacific halibut season in 1951 when the 56-day season set a new record for brevity.

Ordering the closure of Area 3 at midnight June 25, the International Fisheries Commission announced its estimate that the area's 28-million-pound quota would be taken by that time.

The Area 2 season closed May 28, only four weeks in length, establishing a shortest-ever record for that area as well. The Area 2 quota is 25,500,000 lbs.

Closure of halibut fishing in Areas 1, 2, 3 and 4 does not mean that all halibut production for the year is over, however. This year for the first time there are two-sub-areas, 2-B and 2-C, which have recently been underfished as result of the early closure.

These areas—in southern Hecate Strait and in the vicinity of Cape Addington—will be opened to fishing July 26 for a period of 10 days. No quota is established for the catch which may be taken from them in this period.

In addition to the catch from these two areas—which is variously estimated at from 5 to 10 million pounds—there will be some minor later landings until November of halibut caught incidentally to other longline fisheries.

18 Cannery Workers Saved from Airplane

Eighteen salmon cannery workers bound for the Alaska Packers Association plant at Chignik were saved early in June when the plane sank a few minutes after its hull was ripped wide open in landing.

The men were being flown in from Naknek in an amphibian which hit a log in landing. As the plane filled rapidly Pilot Bernard Blanchard and Co-pilot Rusty Fannen cleared and inflated their rubber raft and got their 18 passengers aboard just before the plane sank.

It was at Chignik last year that several workers were lost in the swamping of a skiff.

Johnny Zankich, skipper and owner of the purse seiner *Vittoria*, is shown above with his Western Marine Gear which he says twice saved his boat recently. Once, while proceeding slowly along near Santa Cruz island, traveling in a heavy fog, the rocks suddenly jutted out. The boat was thrown into full speed reverse and, just inches away from disaster, it began to pull backwards, away from destruction. Then, recently, while fishing sardines during the dark of the moon, the *Vittoria* was moving toward what looked like a school of fish. Suddenly it was realized that the school was actually someone else's nets. Captain Zankich threw his control lever into reverse with the engine at full speed. Although the boat was actually on the net when the reverse took hold, seconds later, the net was saved.

Vittoria* to the right, loses no time in reaching the mackerel grounds. She was recently re-powered with an Atlas diesel engine, sold by the National Supply Co., Terminal Island, an 8-cyl. job, developing 365-hp. at 750 rpm., equipped with Model 120 Western Marine Reverse and Reduction Gear 2 to 1 ratio. *Photo of ship by Hoffpauir.

In Mexico, too...

MONEL TAILSHAFTS PREFERRED FOR LONGER SERVICE, LOWER UPKEEP

Now more than ever, when Monel is in short supply, and all metals are hard to get, skippers the world over appreciate the long, trouble-free service they get from Monel® shafts.

For example—Mr. George A. Dew, Shipyard Manager of the National Steel and Shipbuilding Corp. of San Diego, Calif.—has this to say about Monel shafts:

"We have been mass-fabricating steel trawler fleets since 1949. The Mexican operators of these fleets have always preferred Monel shafting because they found it more economical. Their experience has shown that Monel shafts last longer and require practically no maintenance."

Typical of the Monel-shafted steel trawlers built by National Steel and Shipbuilding Corp. are those shown in the photograph above. They are 54 feet long with a 17-foot beam. Power plant is 85 h.p. at 450 r.p.m., swinging a 3-blade, 40½ in. Lambie propeller. The five trawlers were completed in only ninety days. They were built for Pesquera de Topolobampo, S.A., Gulf of California, Mexico.

Monel*

"...It's the SEAGOIN'* metal"

*Reg. U. S. Pat. Off.

EMBLEM OF SERVICE INCO TRADE MARK

THE INTERNATIONAL NICKEL COMPANY, INC.

67 Wall Street, New York 5, N. Y.

AVONDALE

BUILDS THEM BETTER – BUILDS THEM TO LAST – BUILDS THEM OF STEEL

AVONDALE tuna clippers are better, tougher, more seaworthy, more durable, and longer lasting—because they're built of steel! Ask any owner or Captain of an AVONDALE-built clipper. His recommendation will be the proof of the kind of workmanship and skill that AVONDALE puts into each clipper. Before you build, consult AVONDALE engineers or their west coast representatives. Let them prove to you that AVONDALE clippers are better!

West Coast Representatives:

DRAKE & BULLEN

SAN DIEGO, CALIFORNIA

AVONDALE MARINE WAYS, Inc. WESTWEGO, LOUISIANA

Export Fish Buying Confuses San Franciscans

A great deal of interest was caused last month when government bids for Jack mackerel for Greece were opened. Some 96,300 cases were offered by Monterey canners @ $4.80 to $5.50 per case to fill the order of 43.000 cases.

So far the movement of the 43,000 cases to Greece hasn't been reflected in the California Jack mackerel market because canners are stuck with their own ceiling prices, according to market observers.

The bid came out first calling for sardines, herring or mackerel. Since no sardines nor herring were available, the government had to take mackerel.

Previously the government opened bids on 100,000 cases of 24s, sardines and herring. California Street authorities were in the dark as to whether this order was ever filled. This order was for food to feed the Korean civilian population, and could be filled outside the United States.

Greece was said to be back again in the market for 167,000 cases of sardine and squid—no mackerel. Bids to be opened June 22.

The feeling around California Street was that there were about 100,000 cases of spot squid at Monterey, and it was known squid had been canned in southern California waters. The market was reported to be $4.60-$5.00.

It was also reported that there had been a few resales of 15-oz. tall sardines, natural, at around $5 per case.

Monterey Rejoices Over Legislative Victory

Members of the Monterey fishing industry are jubilant about their victory in securing state legislation maintaining the so-called sardine "split season" and extending by 70 miles the southern boundary of the Monterey fishing grounds.

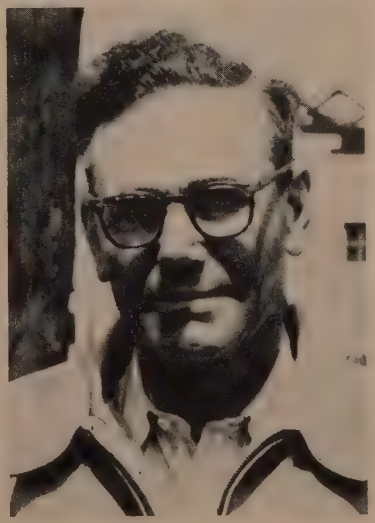
The Monterey industry expected opposition from southern California fishing interests because the Monterey and San Francisco season, which opens Aug. 1, as compared to the southern California sardine season which opens Oct. 1, gives the northern processors a two months' advantage in the market without competition from the south.

The boundary was extended from Piedras Blancas to Point Arguello. This was desired by Monterey fishermen and plant operators because on the Aug. 1 opening date there might be fish there if they have not yet moved north of Piedras Blancas.

"The new boundary gives us that much more chance to procure fish from the known concentration of sardines" said George Clemens, secretary-manager of the Monterey Fish Processors Association who attended committee hearings in Sacramento.

C. Alberto Gutierrez, newly appointed consul general for Costa Rica, recently arrived at San Diego to be greeted by Victor Nigro, right, who for some years has been vice consul. Mr. Gutierrez is making his headquarters at the Southern California Fishermen's Association, of which Mr. Nigro is head. Referring to the close relationship existing between his government and American fishing fleets, the consul general issued this statement: "The future of the fish industry in Costa Rica will be a source of unlimited riches. The government is doing everything possible to offer its guarantee to foreign investments as well as to industry in general. I suggest that all those interested in the fish industry visit my country in order to study the magnificent possibilities. I am sure that my government will give its full cooperation."

Capt. John G. Cardosa, managing owner of the new tuna clipper *Crusader*, completed in June by Puget Sound Boatbuilding Co., Tacoma. His son, Capt. John W. Cardosa, is master of the vessel.



Exploring Vessel Seeks To Intercept Albacore

Exploratory fishing for Albacore was the objective which took the U. S. Fish and Wildlife Service vessel *John N. Cobb* to sea just before the middle of June in an effort to repeat its 1950 interception of the migrating Albacore well off the North Pacific Coast.

The *Cobb* will fish with normal commercial jig gear, and in addition will operate both nylon and linen gillnets.

Stainless steel wire flagline gear also will be employed.

No Loot; Just Liquor

When Jerry Oaksmith and A. L. Rogers bought the Scow Bay Packing Co., last spring, one of the assets they acquired was a locked safe. No one in Petersburg, Alaska, could open it—and there were rumors that it contained a lost hoard of gold dust from the Stikine mines.

Oaksmith and Rogers couldn't curb their curiosity—so they shipped it to Seattle to be opened by a safe expert in the presence of their attorney. Uncle Sam sent along one of his mouthpieces also, to see if the contents were taxable.

They proved to be potable, but not taxable—a half-gallon of whiskey.

Whales and whaling were the topics of a conference at Eureka recently between Capt. Joe Medina, San Diego (right), and Capt. Herman Foband, Humboldt Bay operator.

Alaska Herring Floor Forced Up One-Third by Fishermen

Alaska's herring industry—operators, fishermen and plant workers—reached a basis of agreement for 1951 late on the night of June 7. Twenty-four hours later some of the seiners were on their way north. They were bound for Prince William Sound, where the operators figured they had already lost five days of their already short season.

Settlement with the fishermen was reached on a "floor" of 20¢ per barrel per man, as contrasted with a 15¢ "floor" in 1950. In detail, the formula is this: *Each man of an 8-man crew will be paid 20¢ for each barrel of fish caught by the boat during the season, or 25% of the gross income realized from the products of one barrel of herring, whichever is the greater.*

This arrangement does not provide for the skipper of the boat, who is paid separately by the operator at twice the return realized by a fisherman under the above formula, however it is applied.

One operator estimated the deal *could* produce 28¢ per barrel per share *if* the fish oil at an average of 5 gals. per bbl.; *if* meal is produced in a normal yield; *if* the meal carries a normal 72% protein; and *IF* the products are sold at the maximum permissible under OPS ceilings.

The shore workers settled for a 15% wage increase across-the-board, subject to approval by the Wage Stabilization Board. If this increase is not allowed on the grounds that it transgresses the Johnston formula, then the workers will get the maximum which WSB sanctions.

At presstime the certain line-up of Alaska herring reduction plants was:

Kodiak Area—Chatham Strait Fish Co., Zachar Bay; Southwestern Fisheries Co., Iron Creek; Oceanic Fisheries Co., Port Vita; Wakefield Fisheries, Port Wakefield.

Prince William Sound—Chatham Strait Fish Co., Crab Bay; Port Ashton Packing Co., Port Ashton; Oceanic Fisheries Co., Port Oceanic; Alaska Fishermen's Co-operative, Snug Harbor.

Southeast Alaska—Buchan & Heinen Packing Co., Port Armstrong: Storfold & Grondahl Packing Co., Washington Bay.

16¢ Ceiling is Set For All Fish Oils

Principal categories of fish oils were ceilinged late in May at 16¢ per lb., producer's plant—save for Alaska herring oil, whose ceiling of 16¢ was on an fob. Seattle basis.

O.P.S. in its Statement of Considerations involved in setting the 16¢ price says this is a reduction from 18¢ generally established as a ceiling under the General Ceiling Price Regulation. O.P.S. also adds that the 16¢ ceilings are "double the average obtained from the 1950 supply." Roll-back of fish oil prices to 16¢ is said by O.P.S. to be necessary in order for fish oils to remain on an equal competitive base with other drying oils used in paints.

Tony G. Rosa has been named managing owner of the new tuna clipper *Favorite* at San Diego, which is skippered by *Manuel Madruga*. Tony, brother of *Manuel G. Rosa*, for years skippered the *Portuguesa*, but now is semi-retired. *Chris Rasmussen* is now captain of the latter clipper.

Joe Medina Studies North Coast Whaling

Whales and whaling, from the northern California coast to the waters surrounding the Azores Islands, were the subjects discussed when Capt. Joe Medina, San Diego, visited recently at Eureka and conferred with Capts. Herman Foland and Gilbert Hunter, of that port.

Medina, who is president of the Joe Medina Enterprises, San Diego, helped his former fellow countrymen in the Azores found a modernized whaling station last year to promote island industry and exports. Whaling is an ancient trade in the Azores, but methods are somewhat primitive—or rather original—the whalers working in small boats operating from shore and the harpooner exercising his art by hand. As a youngster, before coming to the United States, Medina learned the whaling business, and on his frequent visits to the islands often takes a hand with the oars or harpoon.

In the past, only whale oil has been processed in the Azores, but Medina's venture marked the start of more extensive utilization of the entire carcass, including meal. However, Medina reports that it has been difficult to dry the meal out sufficiently to meet the requirements of the export trade.

It was with the view of turning up methods that will overcome this difficulty that Medina made his visit to Eureka, inspecting the plant of Maritime Industries at Fields Landing, on Humboldt Bay, and reviewing the processes with Foland, Hunter and others in the Northern California trade. Medina was escorted on his Humboldt Bay visit by F. F. Flaherty, Pacific Fishermen's News representative in that port.

From Eureka Medina flew on to the Pacific Northwest.

Clifton D. "Bud" Day, president, San Carlos Canning Co. and of the Monterey Fish Processors Association, made a quick trip from Monterey to Washington, D.C., to confer on the canned sardine and squid price situation with government officials.

WANTED
MARINE ENGINE SALES MANAGER

for Large Well-Known Diesel Engine Manufacturer

Will cover Continental U. S. and Canada. Must be willing to travel. Age 35-50 years. Give experience, qualifications and salary expected.

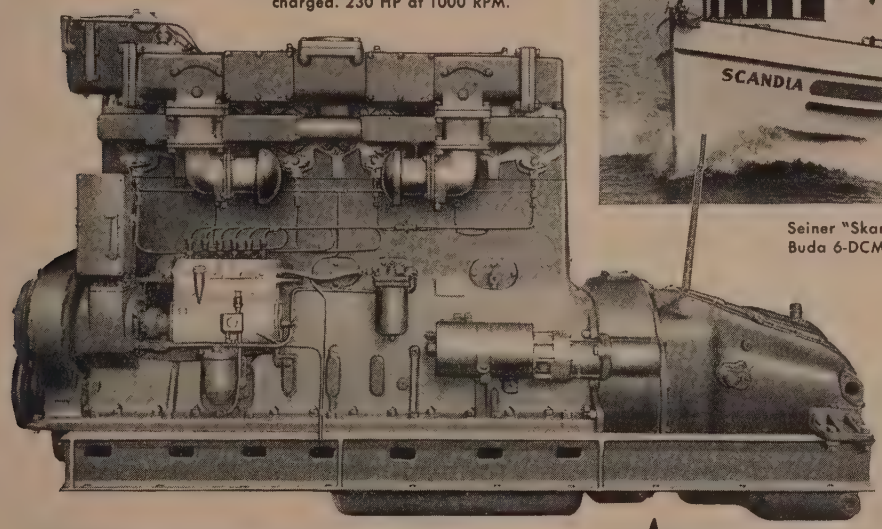
Write Box 751

BUDA POWERED...

FOR QUIET, SMOOTH, DEPENDABLE OPERATION

Tug "Wallace Foss" powered by Buda 6-DCSMR-1879 Supercharged. 230 HP at 1000 RPM.

Seiner "Skandia of Port Madison" powered by Buda 6-DCMR-1879. 196 HP at 1000 RPM.



BUDA Marine Diesels Give:

- ★ **MORE POWER...greater displacement**
- ★ **Smoother, quieter operation... easy starting**
- ★ **Greater fuel economy**
- ★ **More hours between overhauls**
- ★ **Absolute reliability**

Install or specify Buda Marine Diesels—the dependable, economical power that makes money in *any* kind of boat. There's a Buda Diesel made to fit *your* boat . . . *your* type of work. Ask your Buda Marine Distributor about it today. Write for complete information and Bulletins on Buda Marine Diesels and Diesel-Electric Generator Sets now. *The Buda Company, Harvey, Illinois.*

BUDA

BM-15

T. B. Cook Engine Co.
Foot S. W. Gibbs St., Portland 1, Oregon

T. B. Cook Engine Co.
484 Bond Street, Astoria, Oregon

King-Knight Co.
360 Jefferson St., San Francsico 11, Calif.

Buda Engine & Equipment Co., Inc.
3407 Airport Way, Seattle 4, Washington

Buda Engine & Equipment Co., Inc.
2529 Chambers Street, Los Angeles 58, Calif.

Marine Pumps, Inc.
745 So. Seaside Ave., Terminal Island, Calif.

Simson-Maxwell, Ltd.
1931 West Georgia Street, British Columbia, Canada

Manufacturers of Diesel and Gasoline Engines, Maintenance of Way Products, Lifting Jacks, Earth Drills and Material Handling Equipment

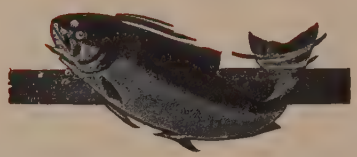
A Continuously Constructive Force in the Salmon Industry . . .

OCEANIC SALES COMPANY

3302 Smith Tower

SEATTLE 4, WASH.

CANNED SALMON



Cable Address:
"NAECO" All Codes

NO CUT BAIT NEEDED

Large Flasher lures 'em up—they hit the Jigger Spoon trailed right behind the Flasher. No cut bait needed. Can be trolled fast without turning over. Jigger Spoon may also be used without the Flasher. Three finishes: in Brass, Nickel and Chrome Silver. Sizes 1 to 7.

FREE Samples Sent Upon Request. Mail This Ad

THE ENTERPRISE MFG. CO., AKRON, OHIO

PFLUEGER
(Pronounced "Flew-ger")
A GREAT NAME IN TACKLE

Ball-Band Boots for Longer, Comfortable Wear

Fishermen enjoy full protection with day-long comfort in this lightweight, special Ball-Band Vac quality boot. Buy Ball-Band for honest boot value.

TRADE MARK

Look for the ® Red Ball on the Boot

BALL-BAND
MISHAWAKA • INDIANA

ENGINE WORRIES?
get a new
UNIVERSAL!

This time make it *honest* marine power —not something merely rigged for the job. A Universal 100% Marine® Motor will give you far more in dependable, low-cost performance — years longer service. Models 8 to 145 h.p. Get your free 40-page Universal Handbook.

UNIVERSAL MOTOR COMPANY
423 Universal Drive • Oshkosh, Wisconsin
World's Largest Builder of 100% Marine Motors

Seattle—Pacific Marine Supply Co. • San Francisco—Thomas A. Short Co. Los Angeles, San Diego—Shepherd Diesel Marine • Honolulu—McWayne Marine Supply Co. • Prince Rupert, Vancouver, Victoria—Edward Lipsett, Ltd.

BILL EARDLEY—Effective

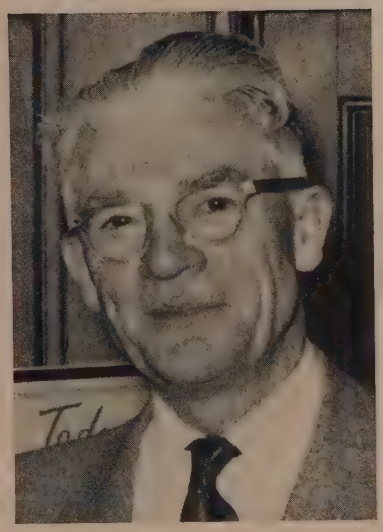
William C. Eardley of Seattle proved himself effective in his first few weeks as chief of the fish section of the Office of Price Stabilization. Newcomer in Washington, and inexperienced in program and protocol, he entered the confused maze of mistakes he inherited with the energy and directness of the businessman.

Conceiving the correction of past mistakes as more pressing than positive action in the effective control of inflation in fish products, Mr. Eardley set himself first to carry-through de-control of frozen fish, which had mistakenly been included under ceilings while fresh fish went free of any control.

With that done—and he got it done with record speed; he turned to elimination of the aberration which held salmon canned in Oregon and Washington under Regulation 22, while that canned in Alaska continues under the General Ceiling Price Regulation. At presstime there was every reason to believe that *this* mistake would be corrected before these words could appear in print.

He concentrates on the most pressing problem, gets it corrected, and then undertakes the next—rather than trying to juggle half a dozen at a time.

An effective businessman, Bill Eardley is showing himself to be a ball-carrier rather than a ball-handler.



W. C. Eardley, chief of the Fish Section, Office of Price Stabilization

Tuna Headquarters Fixed at La Jolla

Scripps Institute of Oceanography of the University of California, La Jolla, 14 miles north of San Diego, has been selected as the U.S. headquarters for the Inter-American Tropical Tuna commission. A second laboratory is to be set up at Puntareanas, Costa Rica. Head of research is Dr. Milner B. Schaefer, who will commute between the two locations.

Women Protest Cut In Sacramento Fishing

Aroused by the newly passed law which will cut Sacramento River commercial fishing in half 18 wives of union fishermen resolved to do something about it, and set up the Women's Conservation League in Martinez, Calif., last month.

There will be a planned educational campaign on the fishing industry in the community and a plan to work with other groups of fishermen's wives throughout California.

A letter was sent to the California Fish & Game Commission protesting the alleged lobbying of E. H. Macauley, its executive secretary, in support of the river closure, while Richard S. Croker, chief, Bureau of Commercial Fisheries was said to have spoken in contradiction to Mr. Macauley's claims of conservation.

Mackerel Grounds Closure Avoided by Compromise

Los Angeles harbor's commercial fishermen have won a fight to prevent outright closure of Southern California's most productive mackerel banks off Orange county. The California state senate accepted the industry proposal to observe certain restrictions relative to seining. John Real, manager, Fishermen's Cooperative Association of San Pedro, and Roy H. Beaton, executive vice president, California Fish Canners Association were active in reaching a compromise with the sport fishing associations. It was estimated around 70% of the mackerel is caught offshore from the 33-mile coastline.

Canning Pismo Clams

During May a total of 52,673 lbs. of Pismo clams were imported from Lower California beaches, from which 1,532 cases, in ½-lb. round cans were produced at San Diego for the importers with equipment for handling the product at California Tuna Canning Company.

Alaska Tax Aids Rupert

Alaska's $50 per man fee for fishermen operating in or near territorial waters cost Ketchikan a lot of halibut business this spring, in the view of fishermen and buyers who noted the sharp rise in deliveries of American halibut to Prince Rupert.

For example, in the period from May 1 through May 30, representing practically the entire Area 2 delivery season, Prince Rupert received 2,160,000 lbs. of American halibut.

The year before, from May 1 to June 3, 1950, the deliveries were 1,762,500 lbs. of American halibut.

While the U. S. deliveries to Prince Rupert were rising as result of the Alaska tax, the sales of Canadian fish over the Prince Rupert exchange dropped in comparison with the year before. Area 2 deliveries of Canadian fish this year were 6,674,000 lbs., against 6,979,000 in the corresponding period of 1950.

The above figures cover only halibut sold over the Prince Rupert exchange, and do not account for Canadian "camp" fish, nor for that delivered direct to packers or storages outside of Prince Rupert proper.

Obviously, figures for "camp fish" landings and direct-to-buyer deliveries are not available, either individually or in the aggregate. However, confidential reports from some of those participating in this trade showed individual increases, which probably account in some degree for the decline in Canadian sales over the Prince Rupert exchange.

Charlie Benedict, San Francisco purse seiner engineer, who recently sold his troller *Jeanette B.* to Seattle interests is now working at the Thomson Machine Works, San Francisco marine machine shop, until the sardine season when he will sign on board *Frank Gandolfo's* San Francisco purse seiner *Aurora* as engineer.

Quality Always

FOR many years the canned salmon industry has utilized its resources to give consumers a better product constantly improving production and distribution methods.

Today, the industry offers with pride a consistently fine basic food that is rich in nutritional value, appetite appeal and adaptability to modern mealtime needs.

A one-pound can of salmon contains enough health-building goodness to feed a family of four a delicious, satisfying meal. High in protein content, it boasts many other essential food requirements also. *Canned salmon is actually an economy food!*

All the facilities of Pacific American Fisheries are pledged to continued development of the industry.

PACIFIC AMERICAN FISHERIES, Inc.
South Bellingham, Washington
"Quality Always"

Sales Subsidiary: DEMING & GOULD COMPANY, South Bellingham

FOOD FISH MARKETING

News and Views of National Trade in Fish and Shellfish

Tuna Price Revisions Furrow Brows of California Operators

The tuna industry of Southern California was in a turmoil as June got underway and the heavy-tonnage season began. A radical price break in wholesale quotations, particularly in private label business, gave the packers a lot of worry.

"Deals" of various kinds throughout the country, coupled with the narrowing space between White Meat and Light Meat quotations, were said to be partially cause for the price break.

Light Meat fancy was quoted as low as $12.50 in early June, although this was not expected to last long. White Meat fancy was quoted in some quarters as low as $14.50, private label; and at $15.50 on advertised brands. Light Meat fancy—with some allowances for advertising, etc. —was quoted at $15.25; C&F at $13.00.

Most of the trouble appeared to spring from the same conditions that have faced the entire food industry for the past two months. Apparently, because of heavy late fall and January and February buying, coupled with the large imports of Japan and Peru, the country was well stocked with the product.

By May 1 the Southern California pack was ahead of 1950, this despite the long clipper strike. Inventories began to build up. However, by late May demand picked up considerably and was brisk in early June. Brokers throughout the country reported sales were excellent from retailer to consumer.

Looking at the industry as of early June, a survey showed it was dropping behind the five months' period of 1950 by 132,000 cases. May was shorter by 7,000 tons than the same month last year.

Cases were naturally dropping. California produced 2,495,683 cases to May 31 last year; 2,363,627 cases this year, a decrease of 132,056 cases.

Outlook was for a further decline in production in June and July, although this might not be borne out, for various reasons. The purse seine catch might step up, although this is doubtful; imports of raw material may be much greater than last year, particularly because of higher quotes for Japanese canned tuna. (See prices quoted for Japanese summer pack, quoted in May.)

Too, the Albacore catch may be greater, but it would have to be sensational to exceed 1950's June and July catch of 11,000 tons. Last year from all sources Southern California received in June and July 57,800 tons. Expert observers calculated packers might not unload more than 35,000 tons in that period this year, a drop in production of 500,000 cases.

Parrott Names Jones To Head Shrimp Sales

Jesse R. M. Jones, Jr., with Wilbur-Ellis Co., and Connell Bros., since 1940, except for three and a half years in the armed services, had been appointed sales manager of the shrimp division of Parrott & Co., with headquarters in San Francisco.

Mr. Jones states that the company will shortly have a 12-oz. consumer type package of Coral brand shrimp on the market. New territories are being opened up for Coral brand shrimp, particularly in Philadelphia, St. Louis, Baltimore and on the Pacific Coast. This fall the Coral brand shrimp will be in the middle West and Eastern markets.

Parrott & Co. is packing shrimp at Guaymas, Mazatlan, and Escuinapa.

Movements of Chums Modest; New-Pack Goods Step Lively

Modest movement—modest as an 1897 bathing suit—marked the salmon market through May and to presstime in mid-June.

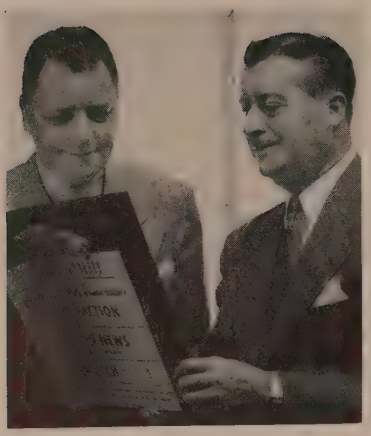
Some Chums were sold as buyers saw their warehouse stocks nearing bottom, and they brought the firm price of $20 which has ruled the standard-quality market for months. Business was placed against *need,* and not on the basis of inventory building or a speculative turn.

Coast Chum stocks were low, but generally rated ample for any business expected to develop from late June until new stocks could be expected about or after Sept. 1. It is true that a small pack of very fine grade Chums from the False Pass district may be expected earlier in the summer, but those goods usually come down with an ear-mark already on them.

The first substantial block of new pack Alaska salmon to be sold was a parcel of about 3,000 cases of Copper River Sockeye halves. These are said to have sold at the packer's ceiling price of $20; and offerings of other comparable goods afloat at the time were made on the same basis.

Ceiling prices on Columbia River fancy Chinooks of May packing are said to range from $23 down to $20.50—and all the production resulting from the four-week season which ended May 26 is believed to have sold at figures in this range. The fish were unquestionably of superior quality in color and oil.

At presstime the salmon price control situation was still Confused—with a capital C—like most things to which Washington has turned its hand. Bill Eardley, chief of the fish section of O.P.S., was devoting his primary attention to clearing the silly situation which kept State-packed salmon under Regulation 22 while the enormously greater production of Alaska continued under the January 25 ceiling set-up.

The promised "tailored", dollars-and-cents, industry-wide ceilings on the Copper River and Columbia River fish had not been uttered at presstime, and a substantial part of the early packs had been sold.

A. L. Desmond (right), general sales manager of the F. E. Booth Company, Inc., and Eugene I. Harrington, Harrington-Richards advertising agency, discuss advertising and promotion plans for the introduction of Booth's Crescent brand tuna in the Portland market.

Booth's Crescent Tuna Introduced in Oregon

Through the Johnson-Leiber Company of Portland, Oregon, A. L. Desmond, general sales manager of the F. E. Booth Company, Inc., San Francisco, recently announced plans for the introduction of Booth's Crescent brand canned tuna in the Oregon market, where it will be a regularly advertised brand with the first newspaper advertisements appearing in June.

Booth's deviled tuna has already proved popular with the consuming public in the Oregon territory.

In addition to the support this campaign is getting from wholesale distributors, the Booth Company has a crew of its own retail salesmen who will contact every retail grocery outlet in the State.

Sam Bortman Distributes "Bumble Bee" in New Eng.

Samuel Bortman, who for 17 years has been associated with Max Rabinovitz in the distribution of products of the Columbia River Packers Association, recently succeeded Mr. Rabinovitz as distributor when that veteran food merchant retired.

Distribution of "Bumble Bee" and other C.R.P.A. brands hereafter will be through the Samuel Bortman Company, 148 State St., Boston 9.

In making this announcement, Fred S. Sandoz, C.R.P.A. sales manager, spoke most warmly of both Mr. Rabinovitz and Mr. Bortman, pointing to the remarkable sales growth which "Bumble Bee" canned fish has had in New England under their merchandising.

Parrott & Co. Acquires Perrin Miller Firm

Parrott & Co., long identified with West Coast food distribution, took over the frozen food brokerage firm of Perrin C. Miller & Co., Los Angeles, June 1.

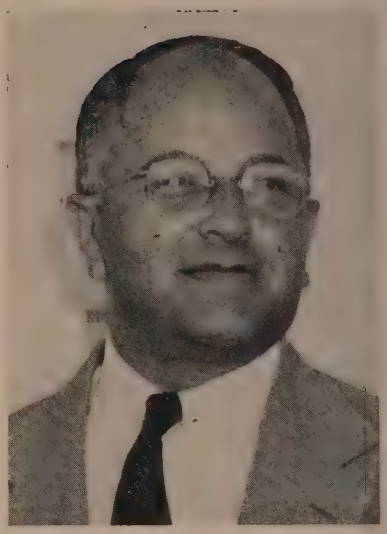
Perrin C. Miller, who has conducted his own business in southern California for the past five years, has been named Los Angeles branch manager of Parrott & Co.'s food divisions, it was announced in San Francisco by J. M. Menzies, president of Parrott. In addition, the entire Miller organization will be taken over, including resident managers in San Diego and Phoenix, Ariz.

The merger of these firms has been negotiated in the interest of a rapidly expanding program now being developed that embraces both the frozen and canned goods field, according to Mr. Menzies.

Perrin C. Miller & Co. will retain its identity as it pertains to its packers and customers as a division of Parrott & Co., and will continue to function as frozen food brokers handling the many lines it has promoted in the past.

It is anticipated that an important campaign featuring the 12-oz. consumer package of Coral brand fresh frozen shrimps, will be launched this fall. Also to be merchandized vigorously will be the products of Pan-Pacific Fisheries, Mr. Menzies states.

The combined operations of Parrott & Co. will soon be located in new quarters, but in the meantime Perrin C. Miller & Co. will function at its present address as well as Parrott & Co.'s food and liquor divisions.



Samuel Bortman, who is succeeding Max Rabinovitz as New England distributor for Columbia River Packers Association.

"Packed with the Wiggle in its tail"

NEW ENGLAND FISH CO.
Seattle, Wash.
Since 1868
Producers • Packers • Distributors
Canned • Fresh • Frozen • Seafoods

ROBERT L. STIX, INC.
Sales Representative
CANNED & FROZEN FISH & SEAFOOD
260 West Broadway, N. Y. 13, N. Y.

"A NEW HIGH IN QUALITY"

CALIFORNIA TUNA CANNING CO.
P.O. BOX 13074, SAN DIEGO 13, CALIF.
EARL M. NIELSEN, PRESIDENT

Mexican Pacific Shrimp Prices

Prices quoted, June 1, f.o.b. storage, West Coast for Fancy, Premium brands, layer pack:

Count	Per Lb.
Under 15	68¢
16-20	68¢
21-25	63¢
26-30	58¢
31-42	50¢
43-65	45¢

NOTE: Demand for Mexican Pacific shrimp strong, particularly in the East. Stocks in storage relatively small; imports dwindling as season nears close. Some freezers at Guaymas reported closing in early June. Reports are of discovery of new bank of reddish-brown shrimp, larger counts in 32 fathoms, north of Mazatlan. Fishing needs heavier gear and this shrimp may not be available in quantity this season.

Japanese Tuna Price Quotations

Quotations, at presstime, summer pack Japanese Canned Tuna, f.o.b. U.S. ports:

	White	*Light*
4 lb. Solid, oil	$33.78	$29.90
4 lb. Flakes, oil	$25.44	
4 lb. Solid, brine	$28.80	$19.72
1 lb. Solid, oil		$25.50
1 lb. Solid brine	$19.82	$17.20
½ lb. Solid brine	$11.02	$ 9.32

NOTE—Quotes Include Duty: Brine, 12½%; Oil 45%.

Stroup Joins Clark

Robert B. Stroup, formerly of the Margaret Ann Super Markets, has joined the retail sales promotion department of A. Earle Clark & Son, food brokers of Miami, Fla.

Enrique Escardo, G., associated some years ago in Los Angeles with the export-import firm of Reed & Romano, is now head of the Peruvian Porducts Company, S.A., Lima, Peru, in handling and processing of fish products.

Bristol & Gustafson Get Cal-Tuna Account

California Tuna Canning Company, San Diego, has opened a new territory for sale of its "Nielsen's", "Sea Preme" and "N & R" tuna brands in the northern sections of Minnesota and Wisconsin. The broker is Bristol & Gustafson, Minneapolis.

Labels on these brands are of aluminum foil in pastel colors, and are making a notable hit wherever displayed, according to President Earl M. Nielsen. The company is gradually opening up new markets throughout the country.

Abalone Patties Win Wide Consumer Approval

Pierce Bros. breaded frozen fresh abalone patties produced in Santa Barbara, and distributed by Fortune Fisheries, San Francisco, are meeting excellent consumer acceptance, states Jack Williamson and Bob Cole of Fortune Fisheries.

The patties are now being handled by many super markets, and sales are up 200% since the first of the year, according to the Fortune Fisheries officials.

G. P. Halferty Appoints North. Calif. Distributor

Berger & Plate Company of San Francisco were recently appointed northern California representatives for the G. P. Halferty & Company's well-known packs of Pioneer minced clams and Showboat Pink salmon.

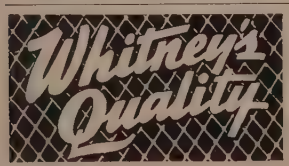
F. S. Cluthey, secretary-treasurer, Strohmeyer & Arpe Co., big New York importers of sea foods, was visiting with *Durand Hart*, Durand Hart & Co., San Francisco sea food brokers last month.

Southern California Canned Fish Prices

Quoted f.o.b cannery, June 1.

TUNA	
Advertised Brands:	
White Meat, Fancy	$15.50
White Meat, C&F	$12.50
Light Meat, Fancy	$15.25
Light Meat, C&F	$13.00
Light Meat, Grated	$11.00 to $11.25
Private Label*	
White Meat, Fancy	$14.00 to $15.00
White Meat, Standard	$13.00
White Meat, C&F	$12.00
Light Meat, Fancy	$12.50 to $14.00
Light Meat, Standard	$12.00 to $13.50
Light Meat, C&F	$11.00 to $11.50
Light Meat, Grated	$10.00 to $10.50
D & L, Grated	$ 8.00
*Range due to sharp price break on private label goods June 1, by at least one West Coast canner.	
TONNO	
½s/48	$15.00 to $15.50
¼s/100	$16.00 to $16.25
MACKEREL	
Pacific, talls/nat, 48	$ 6.25 to $ 6.50
Jack, talls/nat, 48	$ 5.00
Jack, ovals/ts, 48	$ 6.75

W. C. "Bud" Lanthier has been appointed sales manager for the packaged frozen sea foods and the canned goods department of Norfish Sales Co., Oakland, Calif. Mr. Lanthier has had many years experience in food merchandising and sales.



CANNED SALMON

Whitney's Best—Blueback and Chinook
Whitney's—Alaska Red Sockeye
Whitworth—Pink
Golden Shore—Chum

Distributed by

WHITNEY & COMPANY
SEATTLE, WASHINGTON

COLUMBIA RIVER PACKERS ASSOCIATION, INC.,
ASTORIA, OREGON

WHITNEY & CO. ADDS FARWEST PACK IN YEAR'S STAND-OUT SALMON DEAL

Sam Rubinstein, right, president of Whitney & Company, checks with Guy Wilson, vice president and sales manager, some details of the deal by which the Whitney firm in June acquired a substantial block of stock in Farwest Fishermen, Inc., and distribution of that canned salmon pack.

Whitney & Company interests headed by Sam Rubinstein and Guy Wilson early in June purchased a substantial block of stock in Farwest Fishermen, Inc., owning and operating one of Puget Sound's largest salmon canneries at Anacortes.

Full details of the transaction were not available, but it was understood the consideration involved was in the neighborhood of $1,000,000, making the deal the year's most important in the salmon industry.

Sale of the stock will in no way affect the present management of this long-established firm. Fred Buhrman will continue to be in full charge of all operations; and Mel Halgren remains as manager.

At a recent stockholders meeting officers were elected as follows: Sam Rubinstein, president; Fred Buhrman, vice president and treasurer; Mel Halgren, secretary.

Whitney & Company was designated as sales agent for Farwest Fishermen, Inc., but except for this shift there definitely will be no change in personnel or policy. The Puget Sound pack of Farwest Fishermen will be added to the Alaska packs handled by the Whitney firm, completing its line of canned salmon and giving it one of the largest supplies of salmon available to any distributive house.

The company handles all production arising as result of the activities of Carl Rubinstein Company as canners' representatives and bankers; and acts as exclusive broker for a number of Alaska canners.

Beside selling their packs, Whitney & Company has substantial ownership interest in Farwest Wrangell Co., Seldovia Bay Packing Co., Mainland Fisheries, Inc., and the Reefer King Co.

The Carl Rubinstein Company was founded in 1922 by the late Carl Rubinstein, who was succeeded in its presidency by his son, Sam Rubinstein.

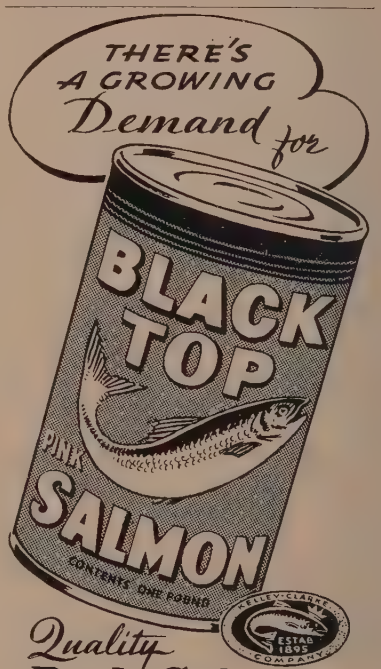
The late Charles Whitney founded Whitney & Company in 1933, and the house since has ranked as one of the leading factors in salmon distribution, its principal brands being: Chinook or Blueback, "Whitney's Best"; Alaska Red, "Whitney's"; Cohoe, "Red Rambler"; Pink, "Whitworth"; Chum, "Golden Shore".

Mr. Wilson, vice president and sales manager of Whitney & Company, joined the firm in 1948 after many years' experience in salmon marketing. His staff was expanded early this summer by the addition of Robert A. Barnes and Rollie W. Eckart, who joined the firm early this summer, Mr. Barnes as Mr. Wilson's assistant, and Mr. Eckart in charge of the shipping department. He formerly was with G. P. Halferty & Co. and later with Puget Sound Navigation Co., and has broad experience in salmon traffic handling.

SEATTLE PRICES

Openly quoted prices on canned salmon at presstime, f.o.b. Pacific terminals.

Salmon—	
Chums, 1-lb. tall	$20.00
Coho, ½-lb.	$16.00
Coho, 1-lb. tall	$28.00
Pinks, ½-lb.	$15.00-$16.00
Quinaults, ½-lb.	$22.00
Chinook, fancy, ½	$20.50-$23.00
Chinook, choice, ½	$18.00
Chinook, standard, ½	$12.00
Tuna—	
Albacore, fancy, ½	$15.00
Albacore flakes, ½	$11.00-$12.00
Albacore, blended, ½	$ 9.00
Crab—	
Alaska King, ½ (24)	$16.50
Dungeness, ½ (24)	$14.00
Dungeness, ½ (48)	$28.00



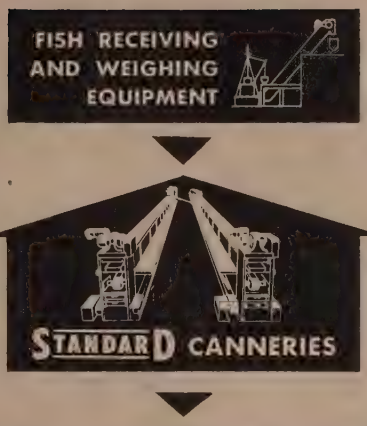
Quality Pink Salmon

KELLEY-CLARKE CO.
American Building
Seattle 4, Washington

C. F. BUELOW COMPANY, INC.
Distributors:
ALASKA and PUGET SOUND CANNED SALMON
NORTHWEST TUNA and CRABMEAT
SMITH TOWER MAIN 4464 SEATTLE 4, WASHINGTON

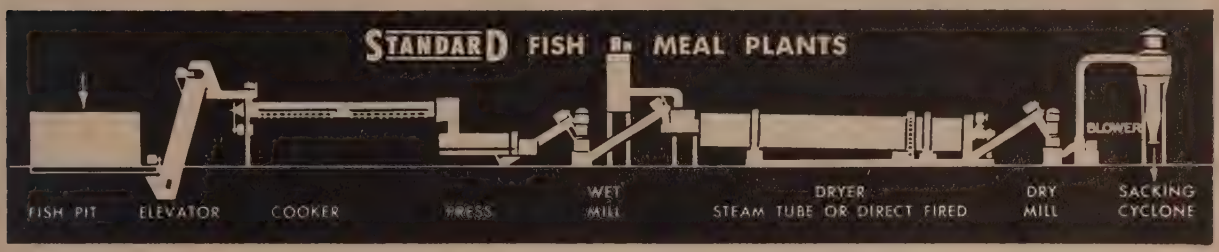
STANDARD

BUILDS COMPLETE EQUIPMENT FOR THE FISH PROCESSING INDUSTRY



For more than forty years STANDARD has been one of the world's leading manufacturers and designers of modern machinery and equipment for the fish processing industry.

To render a complete service in the engineering and construction of profit making plants, the STANDARD organization provides: Research and Development, Process Engineering, Mechanical Design, Shop Fabrication, Field Erection and Initial Operation. No problem is too small for our attention. Inquiries welcomed from all sections of the globe.



Complete Meal and Oil Plants, Fish Canneries, Component Parts.

STANDARD STEEL CORPORATION
5013 BOYLE AVENUE
LOS ANGELES 58, CALIFORNIA
cable address: **STANSTEEL**

WE ARE AGAIN PACKING

OCEAN CRAB

Reliable Brokers solicited in areas not represented in at present time

CANNED • FRESH • FROZEN SEAFOODS

IVAR WENDT
EXCLUSIVE SALES AGENTS
101 CENTRAL BLDG.—SEATTLE 4, WASHINGTON
TELEPHONE ELiot 1272 • TELETYPE SE-573

PACIFIC PEARL CRAB - SALMON - TUNA - CLAMS - OYSTERS

Help yourself to even better ship telephone service

For more profitable ship-shore service... for added convenience in receiving the calls which often mean more business and greater safety at sea ... here are two telephone tips:

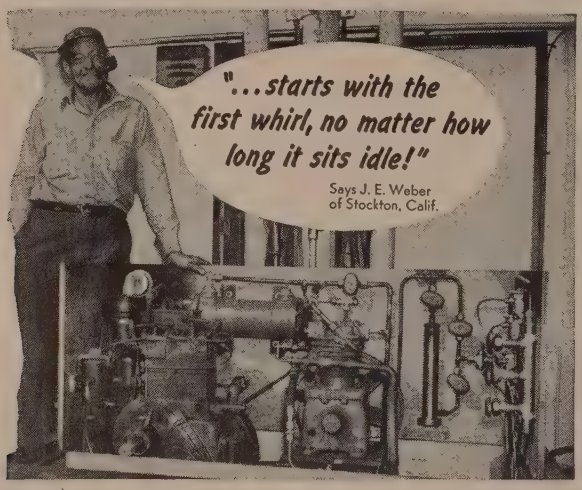
1. Call shore at definite times every day to find out if calls are being held for you.
2. Set up listening schedule and tell those ashore best hours to reach you.

For extra convenience, install selective signalling. Then operators can dial you directly.

To get this free booklet, call or write Pacific Telephone in your nearest large port city.

Pacific Telephone

PETTER DIESEL



Petter AV1 Diesel drives the compressor for a 1½ ton refrigeration unit on Mr. Weber's "Dora W," a trim 41-footer fishing along the California coast for tuna, albacore and salmon. Mr. Weber is typical of the many boat owners who have only the highest praise for their dependable Petter Diesel Engines.

FOR PROPULSION OR AUXILIARY POWER, PETTER SERVES YOU BETTER

LOW INITIAL COST

compare and you'll find Petter is the world's biggest value in small marine diesels!

OPERATING COST

only ¼ the expense of running gasoline engines!

See your nearest Petter dealer now

PETTER DIESELS SOLD & SERVICED IN YOUR AREA BY:

Motor Parts Machine Co.
815 East Pike Street
Seattle 22, Wash.

Shepherd Diesel Marine,
Atlantic and Bandini Blvds.
Los Angeles, Calif.

Sparks-Wills, Inc.
1215 S.E. Grand Ave.
Portland 14, Oregon

West Coast Engine & Equip. Co.
915 Ashby Avenue
Berkeley 2, Calif.

ABOE, Inc.
Petter Engine Division
350 Fifth Avenue, New York 1, N.Y.

Please send me without obligation complete information and prices on the Petter Diesel.

☐ Propulsion ☐ Auxiliary Use

Horse power required_____

Name_____

Address_____

City_____ Zone____ State_____

Type of Business_____

LUBRICATION ECONOMY

"THIS LUBRICANT reduces Service Calls!"

The sales director of the Lynch Corporation, manufacturers of the MORPAC forming and wrapping machine writes us, "*Our Service Engineers can readily spot machines that have had other than LUBRIPLATE Lubrication, as these machines do not give the service they should.*"

1. LUBRIPLATE reduces friction and wear

2. LUBRIPLATE prevents rust and corrosion

3. LUBRIPLATE is economical to use

Write today for case histories of savings made through the use of LUBRIPLATE in your industry.

LUBRIPLATE DIVISION
Fiske Brothers Refining Co.
Newark 5, N.J. Toledo 5, Ohio

The Different LUBRICANT!

DEALERS EVERYWHERE, consult your Classified Telephone Book

HUNTER Cargo Cooler

DEPENDABLE REFRIGERATION AT LOW COST

HUNTER MANUFACTURING CO.
1550 E. 17TH ST. • CLEVELAND 14, OHIO

ALL SIZES OF

PETTER DIESEL ENGINES

FOR IMMEDIATE DELIVERY

only at

Los Angeles AN 10261
San Diego FR 99471

SHEPHERD DIESEL MARINE

San Pedro TE 3-2787

Astoria Trawl Fleet Wins Higher Prices

The hang-up over price which held the Columbia River trawler fleet in port for several weeks during May was settled just at the end of that month and the boats got out in a hurry to make up for lost fishing.

First returns indicated that they hit fancy fishing, for some were back with loads after very short trips.

The price settlement finally agreed upon between the vessel owners, fishermen and dealers generally represented increases—ranging 1 to 2¢ above former figures. Principal items in the new scale were: Dover sole, lb., 5½¢; English sole, lb., 6½¢; Petrale sole, lb., 8¢; other items, 5¢.

Pelican is Entry Port for Canadians

The long effort of P. S. Ganty, manager of the Pelican Cold Storage Co., Pelican, Alaska, to have that port designated as a U. S. customs port of entry for Canadian vessels was crowned with success in May when J. H. Sadlier of Pelican opened his office as customs representative.

International Sockeye Split Nearly Even

Over the five years 1946-51 the Fraser River Sockeye salmon catch has been divided almost equally between the fishermen of the United States and Canada, as required by the international treaty.

Out of an aggregate take of 14,270,417 fish, the Americans have taken 7,008,104 fish or 49.1% and the Canadians 7,262,313 fish.

The peak catch for American fishermen in the five years was 3,551,000 fish in 1946. The following year the catch feel to the lowest level, 88,219 fish.

In 1950 the American catch was 1,220,000 fish, against 894,000 for the Canadians.

View for Visitors

Van Camp Sea Food Company, at San Diego, has completed a raised visitor's walk around the tuna-canning plant to permit a more advantageous view by the many visitors and groups taken through the plant. Also completed is 420′ dock with four unloading hoists, making seven unloaders in all. Bates Harper is manager.

Owner Takes Back Seat on Hi-Liner

The owner of the halibut boat that delivered the biggest load to Vancouver, B.C., from Area 2 this season or any other season worked merely as one of the crew.

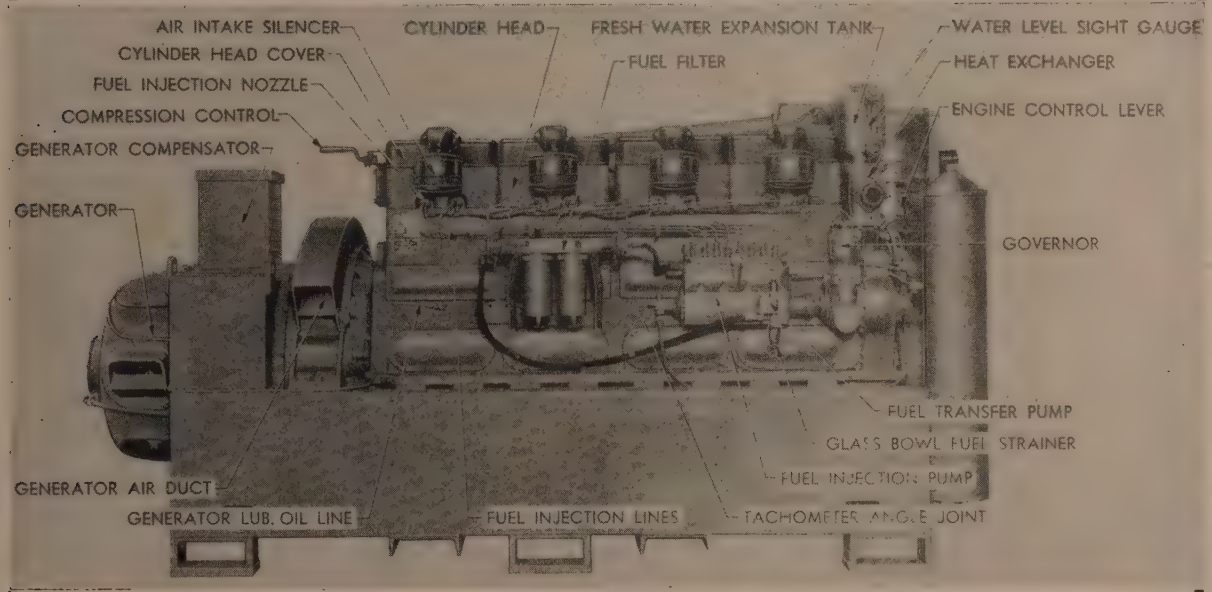
Capt. Sig Trelvik, who bought Nelson Bros. Fisheries' *Western Monarch* at the close of the last herring season, decided to turn the vessel over to a more experienced halibut skipper when the 1951 season opened up the coast. So he asked Captain Oistein Hansen if he'd like the job and Hansen, an old hand in the halibut fishery, gladly accepted. Sig Trelvik, the owner, shipped as one of the hands and he didn't spare himself when it came to hauling in the long lines or loading the slings. It was a happy day for both Hansen and Trelvik when *Western Monarch* delivered 80,000 pounds, marking a new record for the port.

Frank "Pete" Szalinski, owner of the San Dieglo clipper *Mariner*, installed a 60-kw. General Motors generating set aboard before the clipper recently left for southern tuna banks. Also installed on the Union propulsion and auxiliary diesels were Marquette governors.

SURPLUS

REPOWER YOUR REFRIGERATION NOW!

FOLLOW FLORIDA FISHERMEN'S EXAMPLE—USE SURPLUS GENERATORS



SUPERIOR MODEL GBD8 120 KW DC 120/240 V

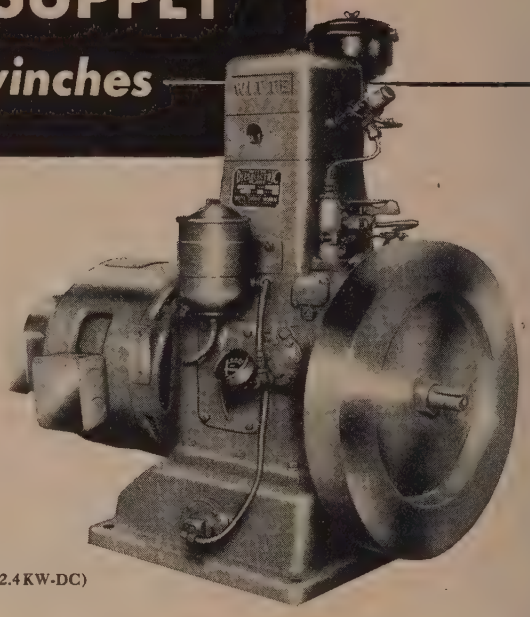
PHONE OR WIRE COLLECT!

MARINE DIVISION — NATIONAL METAL & STEEL CORP.

DEPT. PF, TERMINAL ISLAND (LOS ANGELES HARBOR), CALIF.

PHONE: LOS ANGELES — NEVADA 6-2517

AMPLE POWER SUPPLY
for lights, pumps, winches



● Here's low-cost electrical power for lights, pumps, winches and all other auxiliary equipment — a compact, reliable Witte Dieselectric Plant.

Witte Diesels burn the same fuel as your main diesel engines . . . fit into small spaces . . . provide adequate electrical power 24 hours a day.

For full information on Witte Dieselectric Plants, see your dealer or write to Witte Engine Works. We'll be glad to tell you about small Witte Diesel Power Units—4 to 12 HP—too.

WITTE ENGINE WORKS, KANSAS CITY 3, MO.
Division of Oil Well Supply Company

Witte Dieselectric Model ADTEA—3 KVA-AC (2.4KW-DC)

USS TRADE MARK

WITTE DIESELECTRIC PLANTS and DIESEL POWER UNITS

UNITED STATES STEEL

SAN JUAN BRAND

TRADE SAN JUAN COPYRIGHTED MARK

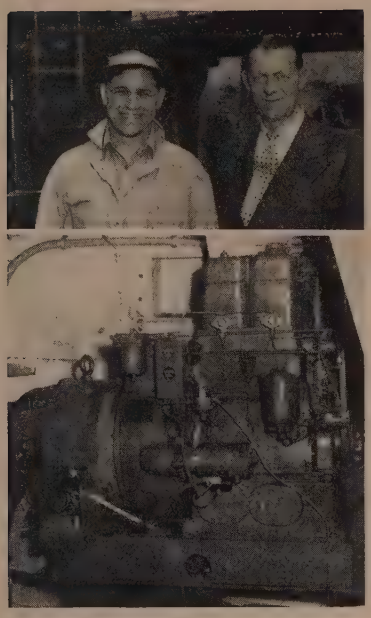
Producers of

Fresh - Frozen - Salt - Smoked - Canned

Pacific Coast Fish Products

San Juan Fishing & Packing Co.

Foot of Stacy St. **SEATTLE 4, U. S. A.**



These men take much pride in this—which they consider a model auxiliary diesel installation in a cannery tender. They are: Don Engblom, fleet superintendent for Kadiak Fisheries Co., left, and Carl Harris, manager of the Al-Pac Engine & Equipment Co., Nordberg engine distributors at Seattle. The auxiliary shown below is a Nordberg 30-hp. diesel driving a 20-kw. generator aboard Kadiak's tender *Robert M*, operated by Capt. Einar Burns. A single cylinder Nordberg of the same type also was installed on the Kadiak tender *Duchess* this spring.

"Marine Products" Issued In Second Edition

For 27 years recognized as the leading technical work on the subject, "Marine Products of Commerce" has been re-issued by Reinhold Publishing Co., New York City, in a largely revised second edition. It is the work of Dr. Donald K. Tressler, nationally known food technologist, and James M. Lemon, U. S. Fish and Wildlife Service technologist.

The work is some 780 pages in length, and covers a wide range of marine products from agar to whaling. It is regarded as the most compact single source on the technological aspects of the preparation of commercial marine products.

The job of revision and bringing-up-to-date has been done effectively; but "Marine Products of Commerce" still suffers somewhat from unbalance, in that the division of space bears little relation to the importance of the subject dealt with. For example, there is a predilection toward agar, which receives 46 pages, while *the entire subject of fish canning is disposed of in 33.*

C.R.P.A. Opens Fish Buying Office in Tokyo

Columbia River Packers Association, Inc., is opening a buying office in Tokyo, Japan, it was announced recently by T. F. Sandoz, president of the company.

The Tokyo office will be in charge of John M. Gizdavich, who has worked for the company since he was a boy, latterly having served as manager of its plant and operations at Newport, Ore.

The company for some time has been supplementing its domestic tuna deliveries with sufficient frozen fish from abroad to permit it to maintain its packing operations at Astoria on a year-round basis, thus giving extended employment, and maintaining its crew at peak efficiency.

Calif. Tagging Salmon Off North Coast

An endeavor to find a connection between the off-shore salmon of the northern California coast and those which appear each year to spawn in the state's coastal and inland rivers will be sought when the Division of Fish and Game this month starts the first of a series of extended salmon tagging cruises out of Eureka.

Marine Biologist Eldon P. Hughes is in charge of operations. With the aid of a 47′ salmon troller, the crew will follow the fishing fleet in pursuit of the off-shore salmon. Fish will be caught, tagged, and returned to the water.

Tags returned from salmon caught off the northern coast have shown that many spawn in the Sacramento River.

BEST ROPE BUY
AT ANY PRICE!
PLYMOUTH
TRADE
MARK
1824
Stocks in Every Port!
Fishing boat owners, skippers, and crews like Plymouth fishing rope for different reasons, but all agree it's the best rope buy at any price in every port.
PLYMOUTH CORDAGE COMPANY
Plymouth, Massachusetts
Sales offices and warehouses at New York, Baltimore, Boston, Chicago, Houston, New Orleans, Philadelphia, San Francisco. Distributors wherever there are fishing fleets.

AIR LIFT DRIER

Offering a new and revolutionary AIR LIFT DRIER to solve meal drying and de-odorizing problems. Now being installed in fish plants throughout the world.

NO BURNING! NO SMOKE! NO ODORS!

Now made in 5 Stock Sizes—2½-5-10-15-20 tons per hour.
Protein yields are up to 8% above conventional drying methods—conserves floor space. One motor, one moving part.

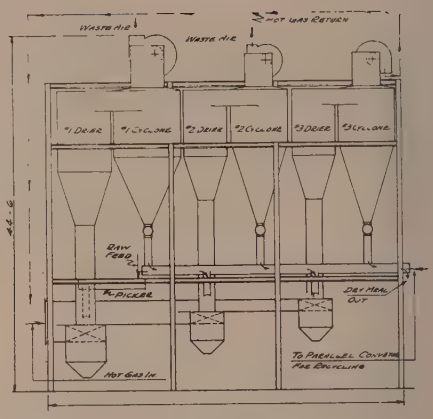
Illustrated here is a 25-ton low temperature drier—a 3-stage unit which has an evaporation capacity of 40,000 lbs. moisture per hour

Manufacturers of

Exhaust Boxes • Reduction Equipment from "Bin to Sack"
Hammer Mills • Cookers • Dewatering Press, Etc.

P & L WELDING & MACHINE WORKS

519 East LaPalma St. ANAHEIM, CALIF. Phone Anaheim 4311



DISTRIBUTORS

Willard Marine Batteries

Next time you need batteries, remember that you pay no more for Willards. And their longer life and freedom from trouble makes *Willards cost less per year to own!*

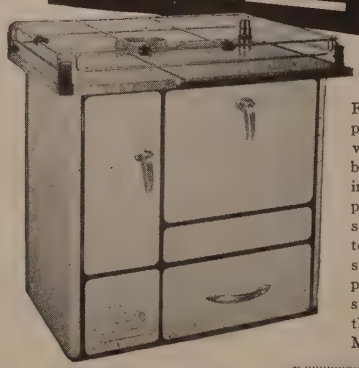
FREMONT ELECTRIC CO.

Power and Light for Marine and Stationary Installations

744 N. 34th St., EV 2323 MAIN STORE — SEATTLE — 132 Spokane St., SE 7984 SOUTH END STORE

King of the Galley!

The OLYMPIC OIL BURNING GALLEY RANGE



Four streamlined Olympic models now offered, with fully-concealed oil burner. Have a gleaming porcelain finish . . . polished top . . . plated sea rails . . . yes, they're tough, but beautiful! Designed and engineered especially for oil with NEW space-saving lines. See them at your nearest Marine Dealer!

Washington STOVE WORKS

EVERETT WASH.

OLYMPIC ALASKA NEPTUNE

Fishermen's Packing Corporation

ANACORTES, WASH.

Canners of

PUGET SOUND SALMON

Our BRANDS

SOCKEYE
"Snow Cap"

COHOE
"Olympic"—"Snow King"
"Green Breaker"

PINK
"Ocean Spray"—"Waterfall"
"Ocean Blue"

CHUM
"Golden West"—"Golden Glow"
"Sea Diver"

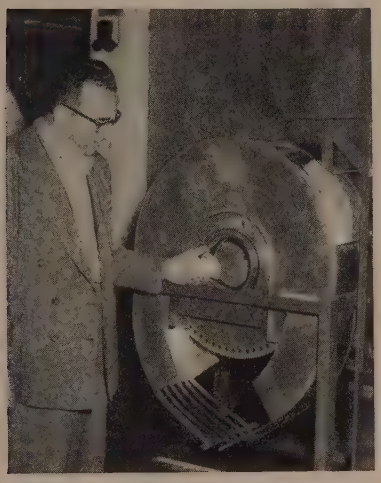
Cannery: **ANACORTES, WASH.**

Crab Meat Picking Machine Revealed

A machine to extract the meat from the bodies of any species of crab has been developed by George P. Woolf and his son Robert G. Woolf, of the Woolf Original Crab Meat Extractor Co., San Francisco.

According to the Woolfs, who have patented the extractor, the machine has practically unlimited capacity, and only one person is needed to feed it.

Woolf, who is well known in the Pacific Coast fishing business, and who worked in the Alaskan salmon



George P. Woolf and his machine for extracting crab body meat.

industry, got his idea from watching the laborious hand picking of crabs.

The extractor consists of a steel frame which holds a stainless steel and aluminum wheel, driven by an electric motor and reduction gear.

The meat is extracted from the body cavities by vibration and concussion caused when the bodies are shaken against a series of stainless steel springs which are set in a horizontal position on the wheel.

An adjustable secondary wheel is set against the revolving springs. The action displaces the bodies, causing the meat to leave the cavities, and to drop down by gravity to receiving pans.

About 80% of the shell is removed by the machine. As the meat accumulates it is passed through the rays of an ultra-violet lamps which fluoresces and distinguishes by color the crab meat from any stray pieces of shell or bone, which are removed by hand.

Ben Ray, 42' combination boat owned by *Frank Koski*, Fort Bragg, has been repowered with a 6-cyl. GM diesel engine, purchased from West Coast Engine & Equipment Co., Fort Bragg.

1951 Pacific Oyster Seed Planting

Delivery	Cases Seed
Oregon	9,523
California	350
Willapa Harbor	20,895
British Columbia	5,360
North Puget Sound	8,710
South Puget Sound	7,061
Total	51,899

Ceiling Price Set On Fish Meals

Office of Price Stabilization completed control of the prices of fish by-products in May when it applied ceiling prices to fish meal and fish solubles. Earlier action had laid ceilings on standard fish oils at 16¢ per gal.

Ceiling price set for fish meals are set at $2.26 per unit of protein, fob. processor's plant or customary loading point.

IN MOTOR OIL, TOO, MOTHER NATURE IS GOOD TO FISHERMEN

Mother Nature put many fine *natural* qualities in the 100% Pennsylvania crude oil used in making Valvoline. She made it more durable—gave it extra protection against thinning out.

Whether your engines are Diesels or gasoline, Valvoline Motor Oil will keep them dependable, thrifty on oil and repairs—longer lasting.

Ask for the 1st Pennsylvania Oil

VALVOLINE

100% PENNSYLVANIA MOTOR OIL

FREEDOM-VALVOLINE OIL COMPANY
An Affiliate of Ashland Oil & Refining Company
Seattle, Portland, San Francisco, and Los Angeles

"GOLDEN MIST"

Fancy Alaska and Puget Sound Sockeye

SALMON

Carefully handled and Vacuum packed from Vitamin-rich Ocean-Fresh Fish in our modern, sanitary canneries, "Golden Mist" Salmon offers you the utmost in flavor, texture and attractiveness.

WHIZ also offers you a quality line of fancy canned Albacore Tuna and Crab Meat packed under the popular "Golden Mist" label.

WHIZ FISH PRODUCTS COMPANY SEATTLE, WASH.

WHIZ FISH PRODUCTS CO.

Producers and Distributors of Selected Sea Foods

2000 Alaskan Way, Seattle 1, Wash.

Quality Prices
FROM
Quality Markets
Let the worlds fastest growing brokerage house make bigger profits for you.
We specialize in all types of frozen food sales with special emphasis on Fish and Frozen seafood. Our central location with close contacts throughout this Country, Canada, Mexico, Australia, South Africa and other foreign countries assures quick, profitable handling of your catch.
"Whether you buy or sell we will serve you well"
Write, wire or call us today for full details!
S&S CO
Stamm-Schulman & Co.
INTERNATIONAL FOOD BROKERS
343 S. Dearborn Street • Chicago 4, Illinois
BOSTON, MASS. 14 Commonwealth Pier
KILMARNOCK, VA.
LOS ANGELES, CALIF. 341 S. Central Ave.
NEW YORK CITY 234 Front St.

ADAMS AMERICAN NETTING — TUBBS CORDAGE — PABCO MARINE PAINTS

A. D'ACQUISTO & SONS

FISHERMEN'S SUPPLIES

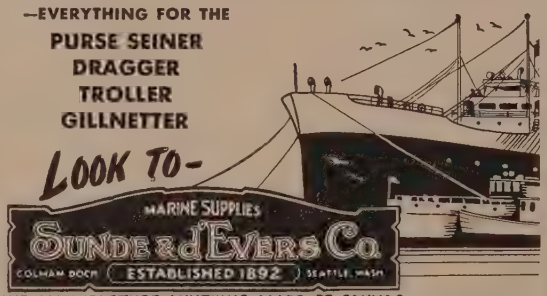
COMPLETE TROLLING EQUIPMENT

Phone: 2-4110

Municipal Wharf, Monterey, Calif.

It's "SUN-d'E" For Top Quality!

—EVERYTHING FOR THE
PURSE SEINER
DRAGGER
TROLLER
GILLNETTER



WE MANUFACTURE ANYTHING MADE OF CANVAS

J. E. LAWRENCE CO.

SEAFOODS

BROKERS — JOBBERS

PORTLAND 9, OREGON

Phone Atwater 3328 Established 30 Years Teletype PD-298

J. J. CAMILLO

Wholesale SEA FOOD Broker

935 W. Harbor Drive, SAN DIEGO 1, California

Maritime Agency

★ BROKER and AGENT ★

Phone Franklin 5189

NUTTALL-STYRIS CO.

825 Columbia

FISHERY SUPPLIES

San Diego 1 Calif.

Distributors

American and Canadian

MILD CURED and FROZEN SALMON

200 Bell St. Dock Pier 66

SEATTLE 1 U.S.A.

Copper River Clam Quota Taken Handily

The 1951 razor clam quota for the Prince William Sound and Copper River districts of Alaska was filled and the season closed May 26.

The quota for the district is fixed at 1,470,000 lbs. of clams in the shell, or 42,000 cases of canned clams, basis of 48 halves per case.

Principal factors in the pack were Whiz-Halferty Canneries and H. M. Parks Co.

Price paid to the clam diggers in the Cordova area was 15¢ per lb., an increase of 20% over the previous year. Workers in the clam canneries also got a 15% across-the-board increase.

San Juan Installs Seattle Salmon Cannery

San Juan Fishing & Packing Co's. headquarters plant at Seattle was equipped in June with a compact but high-speed salmon cannery. The cannery is planned for a 1-lb. tall line and one for halves also—American Can Co. machinery throughout.

The plant will be ready in time for the opening of the Puget Sound salmon season.

Monterey Cans Squid

Eight canneries in Monterey opened the middle of last month to pack squid, with some 100 tons being delivered to both packers and freezers.

Prices remain at $45 for canning and $100 to freezers.

Miss Mary Ann Abbati, Monterey, daughter of Mr. and Mrs. Joseph Abbati, well known in the Monterey fishing industry was married last month to *Peter Torrente,* son of Mariano Torrente, skipper of the Monterey purse seiner *New Vagabond* and Mrs. Torrente. Peter, a former crewman on the *New Vagabond,* has completed his basic training in the USCG and the couple will make their home in Seattle, where he is now stationed.

20 Answers to the Bristol Bay Power Gillnetter Question

To the question: What should a Bristol Bay power boat be? Bryant's Marina offered 20 answers—all exactly alike.

The Bryant's version of the Bristol Bay power gillnetter is a rugged, high-freeboard craft designed by Edwin Monk, built to the Bryant standard in every frame and strake, and powered with a 95-hp. Chris-Craft gas engine driving 20″x17″ Michigan propellers. Six-volt Willard batteries are used for lighting and engine starting through 2:1 reduction. Goodrich cutless rubber stern bearings are used in all 20 boats.

The boats are just a shade under the Bristol Bay limit of 32′. They will carry 2,000 Reds in a capacious fish hold; and sleep two men in a snug little house forward.

Half of the boats were delivered to fish for *Malaspina* and the other half for *Toni B.*

Net rollers are of the "Columbia Roller" type, manufactured by Clatskanie Machine Works, Clatskanie, Ore., and driven by built-in hydraulic motors, supplied by flexible pressure hose. There are three stations for the power rollers, and plenty of hose to permit them being shifted from the stern quarter, to the mid-ships rail, to a position barely abaft the house, which would permit the craft to be operated virtually as a bow-picker.

Hull form is interesting, with a simple semi-tunnel. Mention has been made of the high freeboard, which is particularly noticeable aft. Transoms are narrow, and flare aft to permit the boat to be worked stern-to-sea without swamping.

Engine cooling is through a fresh-water system with keel cooler. The bilge and wash-down pump, and the hydraulic pump driving the roller are powered from the main engine through V-belts and an Albina Engine & Machine Works utility power take-off.

Coleman kerosene stove, two-burner, is provided for the limited cooking needs of the two-man crew. Engine fuel tanks hold 120 gals., sufficient for 45 hours running.

Sharker Returns From Year in Mexico

Frances Anne, sharker, owned by Gud Wandtke, was back at her berth at the Sausalito Shipbuilding Co., after almost a year in Central American waters. She was buying cabrillo for freezing and discharged a cargo at San Pedro. Pinkie Burns is skipper.

Among her other jobs she towed the *Washington Star,* owned by Quick Frozen Sea Foods, Seattle, into Punta Arenas, and then to Paita, Peru. *Washington Star,* ex-*Aleutian Queen,* is a fish freezing boat, and was disabled with a broken crank shaft.

Sea Star, well known San Francisco purse seiner, owned and operated for many years by *Giovanni* and *Sebastiano Aliotti,* has been sold by the brothers to *Antone Ancich,* Gig Harbor, Wn. Antone formerly was of the *Anna A.* The Aliotti brothers will probably skipper other purse seiners out of Monterey during the coming season, and may possibly build a smaller boat.

American Hammered Piston Rings

Briggs Oil Filters
Lathrop Marine Engines

H. G. McLaughlin Co., Inc.
76 YESLER WAY SEATTLE 4

FRAN-KEMIZE

TO ELIMINATE FISH SPOILAGE

Fran-Kem will inhibit the growth of bacteria and molds that cause seafoods to spoil.
Easy to use—no special equipment is necessary.
Be wise—Fran-Kemize for extra profits.

A Legal Product for State and Interstate Shipment.

FRAN-KEM, INC.
Suite 920
10 South La Salle St.
Chicago 3, Illinois
RAndolph 6-1542

TERRITORIAL DISTRIBUTORS:
Fran-Kem Distributors
403 East Pike St.
Seattle, Wash.
MUtual 1055
Washington, Oregon, Alaska

Fran-Kem Sales Co.
P.O. Box 138
Ontario, California
Ontario 626-185
California

There's a BLUDWORTH Depth Sounder for every West Coast fishing requirement! . . . Send for details —

BLUDWORTH MARINE, 92 Gold St., New York 38
Please send details, price: Depth Sounder
NAME
ADDRESS

DOMESTIC

EXPORT

Established 1919

F. A. GOSSE COMPANY

"Purveyors to the Epicurean World"

FIRST . . . In Quality!

CANNED

- ★ SALMON
- ★ TUNA
- ★ SARDINES
- ★ CRABMEAT

1800 EXCHANGE BUILDING MAIN 0475 SEATTLE 4, WASH.

NORTHERN CARGO HOIST

Sturdy

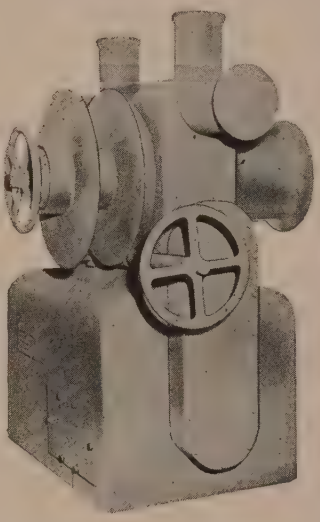
Light Weight

Compact

LOW IN PRICE

A.C. or D.C.

10 hp.



The Answer to Fishing and *Commercial Boat Operators* who need a low-priced, heavy-duty 100% Foolproof Cargo Hoist.

220-440 Volt A.C. or 115-230 Volt D.C. 10 hp. Motor —Bronze and Roller Bearings — 100% Galvanized Welded and Cast Steel Construction—Chain, Worm gear and Bearings bath oiled —Bronze Bushings pressure greased—Portable Operating Station on 20 ft. cord standard equipment.

TACOMA BOATBUILDING CO., INC.

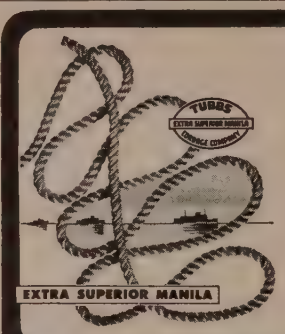
DESIGNERS • BUILDERS

Wood and Steel Construction

Manufacturers and Designers of the "NORTHERN LINE" Auxiliary and Deck Equipment

2142 East D Street Main 8138 Tacoma, Washington

ARNE STROM — HALDOR DAHL



GET EXTRA USE

with

EXTRA SUPERIOR MANILA

"Extra Superior" Manila rope is expertly made from high quality fiber—it provides *extra* use and *extra* value so essential to rope users.

"Extra Superior" Manila rope is an exclusive product of Tubbs Cordage Company, manufacturers of high quality marine rope for more than 90 years.

TUBBS CORDAGE COMPANY • SAN FRANCISCO SEATTLE

AHOY!

You Can Do the Job Better with

STAY-TITE MARINE PRODUCTS

- ★ STAY-TITE CAULKING COMPOUND—greater coverage per pound. Mahogany, gray or black.
- ★ STAY-TITE WATERPROOF GLUE—not affected by moisture.
- ★ STAY-TITE SEALER—stops leaks in deck seams. Remains pliable.
- ★ STAY-TITE WOOD CRACK FILLER—for floors walls, tile, etc.
- ★ STAY-TITE XXX CEMENT—for laying linoleum, felt, canvas, etc.
- ★ STAY-TITE WOOD PRESERVATIVE—prevents dry rot and growths.
- ★ STAY-TITE MILDEW PROOFING—stops mildew and fungus.
- ★ STAY-TITE WATERPROOFING —for canvas and fabrics.
- ★ RUSTGO—Rust Remover.

Your Marine Supply Dealer Carries Stay-Tite Products— or Can Get Them for You—See Him Now.

STAY-TITE PRODUCTS CO., Dept. PF, 3107 Detroit Ave., Cleveland, 13, O.

ARE YOU PLANNING TO BUILD A NEW TUNA CLIPPER?

OR INSTALL NEW REFRIGERATION IN YOUR PRESENT VESSEL?

Get more refrigeration—yet save weight and valuable space with a

Carrier **REFRIGERATION SYSTEM**

REMEMBER—More than 10,000 ships and boats are refrigerated by Carrier. "Marine refrigeration for over 30 years"

FELIX W. POWERS IS NOW MANAGER, REFRIGERATION DIVISION

C. E. HOWARD CORP.

9001 RAYO AVENUE SOUTH GATE, CALIFORNIA

Phone— Lucas 6281

Contact me—and receive latest design of compact machinery for most efficient Refrigeration. Sizes: ¼ hp. to 200-hp. Single or double units, Ammonia, Freon, etc.

Canadian Fishing Co.'s new packer-freighter *Cape Pine*, recently converted at Sterling Shipyards, Vancouver, B.C., from a former U.S. sub-chaser. She is powered with a 320-hp. "Caterpillar" marine diesel.

New Canadian Fishing Craft Reach Higher Power Range

One of the largest seiner-packers built in British Columbia is an 83 footer for the Anglo-B.C. Packing Co., built by A. C. Benson Shipyards, Coal Harbor, Vancouver.

Power plant will consist of a 340-hp. Enterprise heavy duty diesel, one of the largest to be installed in a Canadian west coast vessel. Launching will probably take place some time in July or August.

Sterling Shipyards are building a 74′ seiner-packer for Johnny Dale of the Canadian Fishing Co. and Harold Hendriksen, the latter to be the master of the craft. A 270-hp. "Caterpillar" diesel will be installed when the hull is completed.

One of the most interesting conversion jobs carried out by Sterling Shipyards resulted in the commissioning recently of *Cape Pine*, with a length overall of 110′ and 18′ beam.

Originally built as a U. S. Navy subchaser in Detroit, Canadian Fishing Co. purchased the vessel a few months ago. The frame is oak, with fir planking. Cargo winches, pumps and other facilities have been installed, and in general appearance and serviceability the new owners expect *Cape Pine* to rank with the best on the coast.

Power is provided by a 12-cyl., 320-hp. "Caterpillar" marine diesel.

W. R. Menchions expects to finish by late summer an 80′ seiner for B.C. Packers, which will be powered by a 260 hp. Washington diesel.

One of the most versatile fishing vessels to be operated in British Columbia waters is Ottar Novik's 72′ combination salmon-herring-halibut-albacore boat built recently by Harbor Boatyards, another Coal Harbor plant. This is a push-button job, with hydraulic seine and anchor winches. Power is supplied by a 300-hp. English diesel engine, one of the first to be installed on the coast for that type of vessel.

Harbor Boatworks have also turned out a 57′ seiner for Olaf Bjorge, and this is powered by a 114-hp. diesel. The same yard recently installed a 275-hp. "Caterpillar" diesel in Joseph Katnich's new 68′ salmon and herring seiner.

1951 Canada Fisheries Meeting in Vancouver

Fisheries Council of Canada will hold its first meeting on the Pacific coast next April 28, 29 and 30, at Hotel Vancouver, Vancouver, B. C., the week following the N. F. I. meeting in Los Angeles.

Francis Millerd, head of Francis Millerd & Co., Vancouver fish packers, is president of the Council this year.

"CSF," Veteran Steel Seine Boat is Lost

CSF, which probably was the first steel purse seiner built on the Pacific Coast, struck a reef in the Bering Sea region in May and sank. Her crew of five was saved by the Coast Guard. Ralph Wilson of Seattle was master.

The vessel was owned by Newport Fisheries and was trawling King crab for the freezership *Reefer King*.

CSF was built by Andrew Berg at Seattle in 1934 for the Chatham Strait Fish Co., whose initials composed her name.

"Cap" Cole Passes

Capt. Roy L. Cole, who for many years was master of the Fish and Wildlife Service vessel *Teal*, and agent in charge of Cook Inlet for about 25 years, died in Seattle May 20 at the age of 72.

He was one of the best known and most highly respected men in the Alaska fishery service, which he entered in the early '20s. Capt. Cole retired a few years ago, leaving the Cook Inlet district as the only one in Alaska in which the run of salmon has shown consistent increase.

B.C. Salmon Price Negotiations Protracted

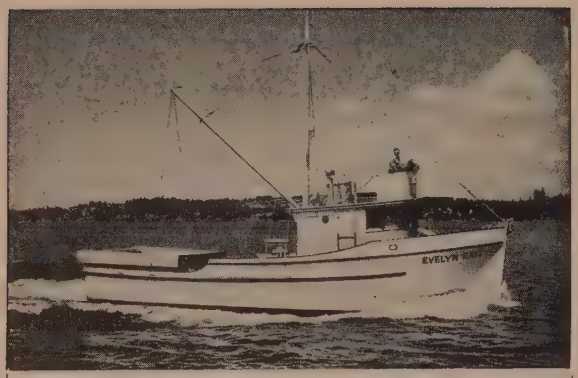
Packers and fishermen in British Columbia at presstime were still negotiating prices to be paid this year for salmon.

Fishermen have been voting on a proposal offered by the packers, providing for the following payments per lb: All areas—Sockeyes, 23½¢; Coho, 16½¢; Pinks, 8.3¢; Chums, 6½¢.

The packers have withheld a price offer on Fall Chum until the United States market has been clarified.

They have been asking 28¢ for Sockeyes, 24¢ for Cohoes, 13½¢ for Pinks and 10¢ for Chums.

Sal Dentice, owner of the Monterey combination boat *New Glory*, is back from a vacation trip to Italy.



New Type, 45' ALASKA SEINER

Get your order in early for this new type Alaska seiner by Grandy.

A rounded stern makes this 45x14-ft. seiner a better sea boat, yet retains the essential advantages of a transom stern . . . good carrying capacity and speed. Powered by D-318 Caterpillar Diesel. Optional is Chrysler Royal with 3½ to 1 reduction gear. Order now for early delivery!

REPAIRING - MARINE WAYS - REFITTING

GRANDY BOAT CO.

2538 Westlake No., Seattle 9, Washington

"THE HOUSE OF FRIENDLY SERVICE"

NORDBY SUPPLY COMPANY

PETTIT

MARINE PAINTS FOR EVERY NEED

Get It At Nordby's

1200 WESTERN AVE., EL. 1364 SEATTLE 1, WASHINGTON

WATER STREET KETCHIKAN, ALASKA

"SEAPURE" Eastern Oysters

"SEAPURE" Quick Frozen Oysters in 12 oz. consumer packages now available.

Growers and Packers

LESTER & TONER INC.

GREENPORT

LONG ISLAND NEW YORK

VITA FOOD

TRADE MARK

PRODUCTS, INC.

GENERAL OFFICES — NEW YORK CITY

Importers & Exporters — Producers, Packers, Smokers

FISH OF ALL KINDS

Mildcured and Frozen from all Principal Centers of Alaska

SEATTLE OFFICE — 1844 WESTLAKE NORTH

SPECIALISTS
in the marketing and sales promotion of canned fish and sea foods
L. H. FROHMAN & SONS • Sales Agents
FOR CANNERS AND PACKERS OF FOODS
510 N. DEARBORN STREET
CHICAGO 10

It Pays to Advertise in

PACIFIC FISHERMAN

Because:

It blankets the concentrated buying power of the Pacific Fisheries by its carefully planned coverage of the industry's canneries and plants, company fleets, vessel owner groups and larger fishing vessels.

KOHLENBERGER ENGINEERING CORPORATION

DEPENDABLE REFRIGERATION SINCE 1922 — FULLERTON • CALIFORNIA

DEPENDABLE REFRIGERATION

SERVING PACIFIC FISHING FLEETS SINCE 1922

Our engineering staff is always at your service. Phone or write for name of nearest boat yard to serve you.

Foreign Inquiries Solicited

General Offices and Factory: **FULLERTON, CALIFORNIA**

Telephones L.A. Mutual 6497 Fullerton 1120

LINES and LEADERS

Western Gear Works Promotes Warren Carhart

The promotion of Warren Carhart to the position of supervisor of application engineering at the Lynwood plant of Western Gear Works was announced today by B. A. Bannan, company vice-president. Carhart has been with Western Gear Works for the past five years and is an engineering graduate of Syracuse University.

Western Gear Works operates a second plant in Seattle and recently announced plans for the construction of a third plant at Belmont, California. The company, one of the world's largest manufacturers of a highly diversified line of gears and gear products for all industries, has two affiliate companies, Pacific Gear & Tool Works of San Francisco and South Western Gear Works of Houston, Texas.

British Diesel Manufacturers Study Pacific Market Potential

Executives from the Associated British Oil Engines, Inc., of Staines, Middlesex, England, with American headquarters in New York City, recently visited the Pacific Coast to survey the sales potential for Petter diesel engines, manufactured by their concern. Associated British Oil Engines, Inc., is an old manufacturer of diesel engines from 5 to 2000 horsepower. Emphasis in America is on the sale of the Petter line of engines which covers small diesel engines. Bosworth Monck, executive vice president, and John A. Jones, regional sales manager, recently spent several days with their Southern California distributor of Petter engines, Shepherd Diesel Marine. In commenting on the Petter line of diesel engines, Mr. Monck stated that Petter engines were already finding wide application in the United States' industrial and marine activities.

W. W. Shepherd, general manager of Shepherd Diesel Marine, commented that engines distributed by that company were proving remarkable in both their performance and dependability, and due to the comparatively small investment for a Petter engine as compared to diesel engines of an equivalent size of other manufacture, the Petter line offers the buyer an attractive value.

Dan A. Palmiter, engine sales manager for Shepherd Diesel Marine, advised that many installations had already been made in the Shepherd territory in the marine industry, and added that the outlook in other industrial fields for application of Petter engines was most promising.

Complete information on the Petter Engine line, manufactured by ABOE, Inc., is available from Shepherd Tractor & Equipment Co. of Los Angeles, San Pedro, and San Diego.

Sunde & d'Evers Promotes G. W. Sunde to Management

George W. Sunde in May became treasurer and general manager of the famous Seattle fisheries and marine supply house of Sunde & d'Evers Co., founded by his grandfather, the late Carl J. Sunde, in 1892.

President of the company is G. C. Sunde, father of the new general manager, whose health has kept him from being active for the past two years, but who has now recovered sufficiently to return to the business in an advisory capacity.

Arthur H. d'Evers, secretary, who has been on leave of absence since last October, also is returning to the company, to serve in an advisory way. In further re-assignment of duties, Henry G. Russell, who has been with the company for 23 years, has assumed the position of director of purchases; and Elmer Linenschmidt, with the company since 1944, succeeds Mr. Russell in calling on certain steamship and industrial accounts.

O. Loel Sunde, brother of George W., who entered the firm's employ in 1944, succeeds Mr. Linenschmidt in calling on boatbuilders and other marine and industrial accounts. M. D. McQuarrie, who joined the firm in 1942, has been named to the position of chief accountant and office manager; while A. F. Stose, formerly with the Seattle Hardware Co., takes over as manager of the sporting goods department, a position relinquished by George W. Sunde in advancing to the general manager's office.

The firm is well and widely known among fishermen, who are assured by Mr. Sunde that his primary policy will be maintenance of the standards and traditions of service and values which have characterized the house through its 59 years.

They advance with Sunde & d'Evers Co.—Left to right: Henry G. Russell, who becomes director of purchases in a personnel shift in this famous firm; Elmer Linenschmidt, who succeeds Mr. Russell in charge of certain steamship and industrial accounts; O. Loel Sunde, follows Mr. Linenschmidt in calling on boatbuilders and other marine and industrial customers.

George W. Sunde, newly appointed general manager of Sunde & d'Evers Co., Seattle fisheries and marine supply and chandlery firm.

Canco Advances Augensen In Pacific Manufacturing

A. T. Augensen, associataed with the American Can Co. for 34 years, has been appointed manager of manufacture for the firm's Pacific division, it was announced recently by C. W. Roberts, vice president in charge of the division.

Mr. Augensen formerly was assistant manager of manufacture for the division. He succeeds C. F. Lausten, who has been promoted to assistant general manager of manufacture in New York. Mr. Lausten has been with the firm 23 years.

Special Trolling Drive Described by Twin Disc

A 16-page engineering bulletin describing its new lines of hydraulic coupling marine gears (with optional trolling drive), and rubber-in-compression marine gears, has been released by Twin Disc Clutch Company of Racine, Wisconsin.

Data on engine housing sizes to which the gears may be fitted; engine speed and horsepower rating charts; and other data helpful to designers, boat builders and power converters, are contained in the booklet, No. M-161, which may be obtained from Twin Disc Marine dealers, or direct from Racine headquarters.

THE ALASKA LINE

First
In Serving
Alaska's
Greatest
Industry

ALASKA STEAMSHIP COMPANY
Pier 42
Seattle 4

SQUID
(CALAMARES)
48/15-oz. tall cans
New Pack
Spot Stock Available
HOVDEN FOOD PRODUCTS CORP.
Monterey, California

Home of
WONDER SEA FOODS
★Fresh ★Frozen ★Canned
LARGEST SHIPPERS ON THE PACIFIC COAST
50 Years Quality Packers
HAINES OYSTER COMPANY
Pier 47, Foot of Jackson St.
Seattle 4, Wash.
Plants: BAY CENTER, POULSBO, SHELTON, BLYN, ALLYN, BLANCHARD.

See KOLSTRAND'S for
Trolling Gurdies—Anchor Winches
General Machine Work
Installations
KOLSTRAND MANUFACTURING CO.
4739 Ballard Ave. SU. 7547 Seattle 7

Willapoint
OYSTERS
—Are opened fresh, canned fresh in rich oyster nectar, and cook and taste like a fresh oyster!

PETERSBURG
Cold Storage Co., Inc.
PETERSBURG, ALASKA
Commercial
FREEZING and STORAGE
Excellent Facilities for Buyers and Fishing Boats
BAIT ICE

H. C. HANSON
Naval Architect : Engineer
Phone ELiot 3549
102 Colman Ferry Terminal
Seattle 4

The Campbell Machine Co.
SAN DIEGO 12, CALIFORNIA
BOAT BLDG. MACHINERY REP'S
ANCHOR and CARGO WINCHES
Distributors
"Union" Diesel Engines

ARTHUR DE FEVER
Naval Architect and Marine Surveyor
Consultation Re-Conditioning Survey
Ship Design Inspection Appraisers
701 East Harbor Drive, P.O. Box 1049
San Diego 12, California
Phone No.: F-9-2159

AKERVICK BROS.
TROLLING EQUIPMENT
Trolling Gurdies — Anchor Hoists
Engine Installations, Repair and Overhaul
General Machine Work
Akervick Bros. Machine Works
Salmon Bay Terminal, Seattle 99 ALder 0074

San Diego Marine Const. Co.
SHIP CONSTRUCTION
and REPAIRS
Marine Railways, Floating Drydock
Foot of Sampson Street
SAN DIEGO 12, CALIF.

COMPLETE STOCK OF
Commercial Fishing Supplies
ADAMS NETTING
Make Our Store Your Headquarters While in San Pedro
SEASIDE
SUPPLY STORES, Inc.
803 S. Palos Verdes Street
San Pedro, California
Phone: Terminal 2-7297

Highest Quality
ARB
Brand
Canned Mild Cured and Frozen
SALMON
FARWEST WRANGELL CO., INC.
WRANGELL, ALASKA
Seattle 9 Office: 750 Westlake N.
Phone: MAin 7448

G. BRUCE NEWBY
Consulting Naval Architect
and
Marine Engineer
Telephone 366-35 4549 East Anaheim St.
Long Beach 4, California

Harbor Boat Building Co.
1000-TON DRYDOCK
MARINE WAYS
REPAIRS—COMPLETE SHOPS
24-Hour Service
Terminal Island California

Al Larson Boat Shop
SAN PEDRO, CALIF.
Naval Architects and Boat Builders
Specializing in Commercial Fishing Boats
General Machine and Repair Work

YOU MAKE MONEY ON THE BEACH, TOO
when you bring your boat to
NATIONAL STEEL AND SHIPBUILDING CORPORATION
HARBOR DRIVE AT 28th
Phone Franklin 9-8065 • San Diego 12

EDWIN MONK
Naval Architects
Edwin Monk . . . . . Lorne Garden
Marina Mart, 1500 Westlake North
SEATTLE 9 GArfield 7907

Eastern Paint Manufacturers Visits Pacific Outlets

C. Edward Raabe, president, C. A. Woolsey Paint & Color Co., New York City, spent some busy days on the Pacific Coast in May calling on the trade and meeting with the company's marine distributors in California, Oregon and Washington. The trip started off as a pleasure jaunt, with Raabe, accompanied by Mrs. Raabe, coming through the canal and up the coast to Los Angeles on the "President Polk." There they were joined by J. W. "Jack" Nally, Woolsey's Pacific Coast representative, with headquarters at Pasadena, Calif. After visiting with customers and distributors in the Los Angeles Harbor and San Francisco Bay areas, they headed north calling on the Oregon Marine Supply Co. at Portland and the Pacific Marine Supply Co. at Seattle, both of whom have handled Woolsey's marine paints for many years. Mr. and Mrs. Raabe left Seattle for home May 23.

T. B. Cook Firm Gets Kermath Distribution

Truman B. Cook of the T. B. Cook Engine Company, Portland, Ore., announces his firm has been named distributor for the Kermath line of marine engines for Oregon and the counties of Washington along the Columbia River. Cook is at present in Astoria in connection with engineering services the firm is performing for the Astoria Marine Construction Company on the new Navy minesweepers (AM) being built there. In charge of Portland operation in the absence of Cook is Joseph M. Haughey, formerly Pacific Coast Marine Manager for the Buda Company and the Packard Motor Car Company. In charge of parts and service on the Kermath line is Earl Roberts, formerly Service Manager for Kermath Manufacturing Co.

Hunter Cargo Cooler-Heater Units For Truck Trailers

Motor Cargo, Inc., one of the nation's largest motor freight carriers, is completing the installation of 17 Hunter Combination Cargo Cooler and Heater Units in a fleet of new Brown and Fruehauf insulated trailers. The installation is indicative of the rapidly growing trend toward this recently perfected system of completely controlled dry ice refrigeration.

Light in weight and extending only 19" from the front wall of the trailer, the Hunter Cooler requires practically no maintenance since its only moving parts are two electric blower motors. It utilizes and very accurately controls the unmatched refrigerating capacity of dry ice by means of a forced air circulation system which, in effect, continuously and completely wraps the cargo in a blanket of circulating refrigerated air. Operating automatically, the system is under thermostatic control at all times. The Hunter gasoline-burning heater unit, encased in the same housing as the Cooler uses the same ducts for circulation of heated air. Mounted on the outside of the trailer nose is a housing containing the controls and stand-by battery for the combination unit, and the heater's fuel tank. Current for over-the-road operation is supplied by the tractor's electrical system. The Unit also provides for stand-by operation of either the Cooler or Heater from its own battery or by connection with any 110-volt current source.

The Hunter Combination Cargo Cooler and Heater Unit is manufactured by Hunter Manufacturing Co., 1550 E. 17th St., Cleveland 14.

Sperry men confer at Seattle. Left to right: F. H. Demmitt, sales engineer, Far East representative Sperry Gyroscope Company, Division of The Sperry Corporation; H. C. Foster, branch manager of Vancouver, B.C., office, Sperry Gyroscope Company of Canada Ltd.; R. E. Erbentraut, assistant marine sales manager, Sperry Gyroscope Company, Division of The Sperry Corporation; D. I. Cameron, marine sales manager, Sperry Gyroscope Company of Canada Ltd.; B. D. Russel, sales manager, Sperry Gyroscope Company of Canada Ltd. The Canadian officials inspected the Seattle branch office and plant in connection with their planning of new offices in Canada; Demmitt, formerly at Seattle, was enroute from Tokyo to New York; Erbentraut was on tour visiting Canadian and Pacific Coast offices of The Sperry Corporation.

New-Type Chain Drive Featured For Fisheries

A revolutionary power transmission chain drive, of far-reaching significance to America's fishing industry, has been announced by the Morse Chain Company.

Featuring entirely new design principles and called Morse Hy-Vo (high velocity) chain drive, it provides a power transmitting medium that combines the ruggedness and dependability of a gear drive with the smoothness and lack of vibration of a belt.

Opening whole new fields of possible applications in industry, Morse Hy-Vo makes possible single drive units capable of transmitting as much as 5,000 horsepower, at linear speeds up to 6,500 feet per minute, or rotative speeds up to 3,600 revolutions per minute. A Hy-Vo drive only two inches wide has transmitted as much as 500 horsepower.

Morse officials state, however, that the current critical shortages of necessary materials have made it necessary to restrict orders for the new drive only to those with defense or essential ratings.

SALT

That Has Stood the Test for Over 45 Years

All Grades :: High Quality :: Fair Prices

Long Beach Salt Co.

2476 Hunter Street, Los Angeles 21, Calif.

PROMPT SERVICE BY TRUCK OR RAIL

PHONE: TUcker 1424

ALWAYS QUALITY DEPENDABLE

OXENBERG BROS.

SMOKED FISH PRODUCTS

Receivers and Distributors of

ALL KINDS OF FISH FOR SMOKING AND CURING

PACKERS MILD CURED AND FROZEN SALMON

GENERAL OFFICES, FACTORY & COLD STORAGE

276-280 METROPOLITAN AVE., BROOKLYN, N.Y.

Plants and Branches

SEATTLE, WASHINGTON

Alaska, Canada, England

ADVERTISING INDEX

Aboe, Inc. 58
Akervick Bros. Machine Works 70
Alaska Steamship Co..... 70
American Can Co. 4
Avondale Marine Ways, Inc.... 46

Bellingham Marine Supply Co... 14
Bludworth-Marine 65
Brownell & Co., Inc..... 8
Buda Co., The..... 49
Buelow & Co., Inc., C. F..... 56

California Tuna Canning Co.... 54
Camillo, J. J..... 64
Campbell Machine Co. 70
Caterpillar Tractor Co.....Inside Front Cover
Chris-Craft Corp., Marine Div.. 28
Chrysler Corp., Marine Eng. Div. 5
Columbia River Packers Assn. 55
Continental Can Co..... 3

D'Acquisto & Sons, A..... 64
DeFever, Arthur 70

Ederer Co., R. J..... 2
Enterprise Engine & Mchy. Co., Marine Div. 40
Enterprise Mfg. Co..... 50

Fairbanks-Morse & Co..... 10
Farwest Wrangell Co., Inc..... 70
Fibreboard Products, Inc.....Outside Back Cover
Fishermen's Packing Corp..... 62
Fran-Kem, Inc. 65

Freedom-Valvoline Oil Co..... 63
Fremont Electric Co. 62
Frohman & Sons, L. H..... 68

Gosse Co., F. A. 66
Grandy Boat Co. 68

Haines Oyster Co. 70
Hanson, H. C. 70
Harbor Boat Bldg. Co..... 70
Harbor Marine Supply, Inc..... 14
Harnischfeger Corp. 6
Hayssen Mfg. Co. 44
Heminway & Bartlett Mfg. Co.. 8
Hiller, Paul W. 68
Hovden Food Products 70
Howard Corp., C. E..... 66
Hunter Mfg. Co. 58

International Nickel Co. 46
International Paint Co. 12

Kelley-Clarke Co. 56
Kohlenberger Eng. Corp. 68
Kolstrand Mfg. Co. 70

Lambie Propeller Co. 12
Larson Boat Shop, Al 70
Lathrop Engine Co., The..... 20
Lawrence Co., J. E. 64
Lester & Toner, Inc. 68
Linen Thread Co., Inc. 26
Long Beach Salt Co. 71
Lubriplate Div., Fiske Bros. Refining Co. 58

McLaughlin Co., Inc., H. G..... 65

Michigan Wheel Co. 20
Mishawaka Rubber & Woolen Mfg. Co. 50
Monk, Edwin 70
Murphy Diesel Co. 32

National Metal & Steel Corp... 59
National Steel & Shipbuilding Corp. 70
National Supply Co., Engine Div. 42
Newby, G. Bruce 70
New England Fish Co. 54
Nordberg Mfg. Co. 39
Nordby Supply Co. 68
Northern Products Corp. 64
Nuttall-Styris Co. 64

Oakite Products, Inc. 72
Oceanic Sales Co. 50
Onan & Sons, Inc., D. W..... 12
Oregon Marine Supply Co. 14
Oxenberg Bros. 71

P & L Welding & Machine Works 62
Pacific American Fisheries, Inc. 50
Pacific Fishing & Trading Co... 14
Pacific Marine Supply Co. 14
Pacific Tel. & Tel. Co., The.... 57
Pan American Radio Corp. 20
Paterson Parchment Paper Co.. 18
Petersburg Cold Storage Co..... 70
Pfizer & Co., Inc., Chas..... 24
Plymouth Cordage Co. 61
Puget Sound Engineering Corp. 20

Radiomarine Corp. of America.. 13

San Diego Marine Constr. Co... 70
San Juan Fish & Pack. Co..... 60
Seaside Supply Stores 70
Shell Oil Co....Inside Back Cover
Shepherd Diesel Marine.....12, 58
Snow Nabstedt Gear Corp..... 11
Sperry Gyroscope Co.....36, 37
Stamm-Schulman & Co. 64
Standard Electronics Corp..... 44
Standard Oil Co. of Calif..... 23
Standard Steel Corp. 57
Stay-Tite Products Co. 66
Stix, Robert L. 54
Submarine Signal Div. Raytheon Mfg. Co. 72
Sunde & d'Evers Co. 64

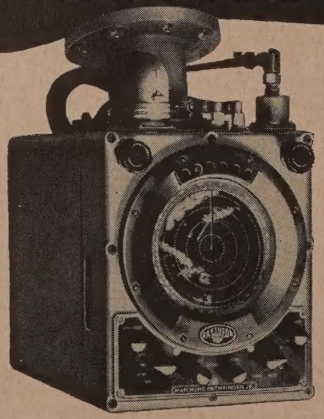
Tacoma Boatbuilding Co..... 66
Tacoma Marine Supply Co..... 14
Tide Water Associated Oil Co.. 9
Tubbs Cordage Co. 66

Union Oil Co. 30
Universal Motor Co. 50
U. S. Steel Corp..... 60

Vita Food Products 68

Washington Stove Works 62
Wendt, Ivar 57
Western Gear Works 7
Whitney & Co. 55
Whiz Fish Co. 64
Willapoint Oysters, Inc. 70
Witte Engine Works 60

It's Clear Sailing with MARINERS PATHFINDER* Jr. Aboard SMALL VESSELS



REASONABLY PRICED TO FIT YOUR BUDGET

Now all types of small craft from tugs to fishing vessels can sail safely in every weather with a Mariners Pathfinder Jr. Only 250 lbs. in weight, it is easily installed in the limited space available in small vessels. Its comparatively *low cost* means every boat owner can afford a Mariners Pathfinder Jr.

Submarine Signal Marine equipment is available on convenient budget terms. Write for information.

SUBMARINE SIGNAL DIVISION
RAYTHEON MANUFACTURING COMPANY
DEPT. 6460-BB, WALTHAM 54, MASS.
*Reg. U. S. Pat. Off.

Now--Descale Diesels Without Dismantling

NO NEED to dismantle diesels when cooling lines are clogged with scale. Instead, simply circulate through water-cooling system recommended solution of Oakite Compound No. 32. Does the job in a fraction of the time formerly required. No dismantling . . . no laborious hand-rodding.

DETAILS FREE. Write today.

OAKITE PRODUCTS, INC.
1001 E. First St., Los Angeles 12, Cal.
681 Market St., San Francisco 5, Cal.
Technical Service Representatives located at San Diego, Sacramento, San Francisco, Seattle, Salt Lake City, Portland and Spokane. Consult local telephone directory

SPECIALIZED INDUSTRIAL CLEANING
OAKITE
TRADE MARK REG. U. S. PAT. OFF.
MATERIALS • METHODS • SERVICE

NEW *alkaline* Shell X-100 Motor Oil neutralizes Acid Action

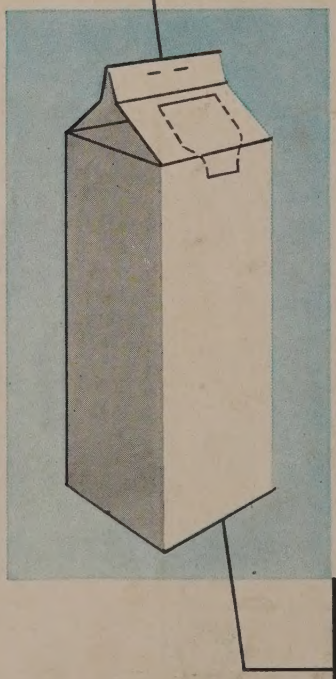
It's not *friction* but *acid action* that causes 90% of engine wear! To neutralize the harmful effect of the pint or more of acid formed in average daily driving, Shell Research has produced an *alkaline* motor oil—Shell X-100. Fortified with alkaline "X" safety factors, it neutralizes the acid action, prolonging your engine's life.

In addition, this new premium heavy duty motor oil possesses cleaning factors which help prevent deposits that would foul your engine.

Shell X-100 is the finest motor oil money can buy. Let your Shell dealer give your engine the protection of this new alkaline Shell X-100 Motor Oil today.

It's Incomparable

"Do you think those new-fangled milk containers are here to stay?"



It's a far cry from the bulk milk can of yesteryear to the modern "Pure-Pak," disposable milk carton of today . . . made out here in the West by an organization having control over production from the manufacture of the virgin-wood paperboard to the final multi-color printing that gives a carton *Sales Appeal.*

FIBREBOARD PRODUCTS INC.

REG. U.S. PAT. OFF.

FIBREBOARD
PRODUCTS INC.
15 PLANTS ON THE PACIFIC COAST

HEAD OFFICE: 1789 MONTGOMERY STREET • SAN FRANCISCO 11

Sales Offices: San Jose • Fresno • Los Angeles • Oakland • Sacramento • San Diego • San Francisco • Baltimore • New York • Portland Salem • Philadelphia • Salt Lake City • Seattle • Yakima

DEDICATED TO BETTER PACKAGING